Minges, Allison

From:	MATTHEW GISSENDANNER <matthew.gissendanner@dominionenergy.com>
Sent:	Wednesday, April 14, 2021 3:09 PM
To:	kmixson@selcsc.org; Nelson, Jeff; Pittman, Jenny; TSpeer@TurnerPadget.com; jwkuykendall@jwklegal.com; dneal@selcnc.org; fknapp@knappagency.com; bdurant@sowelldurant.com; peter@energync.org; Bateman, Andrew; rmangum@turnerpadget.com; tyler@votesolar.org; MDyenson@TurnerPadget.com
Cc:	Butler, David; Stark, David; Wessinger-Hill, JoAnne; PSC_Contact; KENNETH BURGESS; KAREN SCRUGGS
Subject:	[External] Docket No. 2020-229-E: DESC Proposed Order
Attachments:	cert serv 2020-229-E.pdf; Boyd ltr Proposed Order 2020-229-E.pdf; DESC Solar Choice Proposed Order.pdf
Importance:	High

Counsel:

On behalf of Dominion Energy South Carolina, Inc., attached is the proposed order which the Company filed with the Commission in the above-referenced docket this afternoon. Also included is a cover letter and certificate of service.

Matt Gissendanner

Matthew W. Gissendanner
Senior Counsel
Dominion Energy Services, Inc.

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Dominion Energy®

April 14, 2021

VIA ELECTRONIC FILING

The Honorable Jocelyn Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, South Carolina 29211

RE: Dominion Energy South Carolina, Incorporated's Establishment of a Solar Choice Metering Tariff Pursuant to S.C. Code Ann. Section 58-40-20
Docket No. 2020-229-E

Dear Ms. Boyd:

Enclosed for filing on behalf of Dominion Energy South Carolina, Inc. ("DESC") is a Proposed Order in the above-captioned docket.

By copy of this letter, DESC is providing a copy of the Proposed Order to counsel for the parties of record.

If you have any questions, please do not hesitate to contact me.

Very truly yours,

Matthew W. Gissendanner

Matthew W. Gissendanner

MWG/kms
Enclosure
cc: Andrew M. Bateman, Esquire
Peter Ledford, Esquire
Michael Dyenson, Esquire
Jeffrey M. Nelson, Esquire
Frank Knapp, Jr.
David L. Neal, Esquire
Tyler Fitch, Esquire
Jeffrey W. Kuykendall, Esquire
R. Taylor Speer, Esquire
Jenny Pittman, Esquire
Kate L. Mixson, Esquire
Bess J. DuRant, Esquire
Robert P. Mangum, Esquire
(all via electronic mail only w/enclosures)

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2020-229-E

	)
Dominion Energy South Carolina,	)
Incorporated's Establishment of a Solar	)
Choice Metering Tariff Pursuant to S.C.	)
Code Ann. Section 58-40-20	)
	)

PROPOSED ORDER

ON BEHALF OF

DOMINION ENERGY SOUTH CAROLINA, INC.

TABLE OF CONTENTS

INTRODUCTION

This matter comes before the Public Service Commission of South Carolina ("Commission") pursuant to the requirements of S.C. Code Ann. § 58-40-20, as contained in Act No. 62 of 2019 ("Act 62"), which was enacted by the South Carolina General Assembly and became effective on May 16, 2019. Specifically, Act 62 directed the Commission to "establish a 'solar choice metering tariff' for customer-generators to go into effect for applications received after May 31, 2021." S.C. Code Ann. § 58-40-20(F)(1). On September 17, 2020, the Commission established this docket for the Dominion Energy South Carolina, Inc. ("DESC") solar choice metering tariff in Order No. 2020-622.

I. NOTICE AND PROCEDURAL BACKGROUND

On October 5, 2020, the Commission's Clerk's Office posted a Notice of Filing and Hearing and Prefile Testimony Deadlines for DESC's establishment of a solar choice metering tariff pursuant to S.C. Code Ann. § 58-40-20. That notice memorialized the procedural schedule for the docket.

On December 17, 2020, the Clerk's Office posted a Revised Notice of Filing and Hearing and Prefile Testimony Deadlines ("Revised Notice"), which extended the deadline for filing a Petition to Intervene from November 9, 2020, to January 15, 2021. By transmittal letter dated that same day, the Clerk's Office required DESC, on or before January 8, 2021, to publish the Revised Notice in newspapers of general circulation and to provide the Revised Notice to customers by U.S. mail or electronically to customers who have agreed to receive notice electronically.

On January 11, 2021, the Clerk's Office posted a Second Revised Notice of Filing and Hearing and Prefile Testimony Deadlines, changing the due date for the Other Parties of Record Direct Testimony from January 15, 2021, to January 22, 2021, the due date for DESC's Rebuttal

Testimony from February 5, 2021, to February 12, 2021, and the due date for Other Parties of Record Surrebuttal Testimony from February 12, 2021 to February 19, 2021.

On January 14, 2021, DESC filed affidavits with the Commission demonstrating that it had timely published the Revised Notice in newspapers of general circulation and provided the Revised Notice to customers in compliance with the instructions in the transmittal letter dated December 17, 2020.

By Order No. 2021-26, dated January 13, 2021, the Commission granted the motion made by Vote Solar on December 22, 2020 and required DESC to provide to its customers via a billing insert additional notice of a public participation hearing to be held on March 23, 2021. The order also provided that the parties of record would have an opportunity on March 25, 2021, to respond to the comments made at the virtual public hearing as part of the continued merits hearing before the Commission.

On January 14, 2021, the Clerk's Office posted a Notice of Virtual Public Hearing. Later that same day, in response to comments by Vote Solar and intervenors, the Clerk's Office posted a Revised Notice of Virtual Public Hearing. By revised transmittal letter dated that same day, the Clerk's Office directed DESC to provide its customers the Revised Notice of Virtual Public Hearing on or before February 22, 2021, by U.S. Mail or electronically to customers who have agreed to receive notice electronically.

On February 23, 2021, DESC filed an affidavit demonstrating that it had provided the Revised Notice of Virtual Public Hearing to customers in compliance with the revised transmittal letter dated January 14, 2021.

II. PARTIES AND INTERVENTIONS

DESC was represented by K. Chad Burgess, Esquire, and Matthew W. Gissendanner, Esquire.

The South Carolina Office of Regulatory Staff (the "ORS"), automatically a party pursuant to S.C. Code Ann. § 58-4-10(B), was represented in this docket by Andrew M. Bateman, Esquire, Jenny R. Pittman, Esquire, and Jeffrey M. Nelson, Esquire.

Petitions to Intervene were filed by the following parties: Alder Energy Systems, LLC ("Alder Energy"); Vote Solar; Solar Energy Industries Association ("SEIA"); North Carolina Sustainable Energy Association ("NCSEA"); Southern Alliance for Clean Energy ("SACE"); South Carolina Coastal Conservation League ("SCCCL"); Upstate Forever ("UF"); and Frank Knapp, Jr. The Commission granted each of these parties intervenor status. DESC, the ORS, Alder Energy, SEIA, NCSEA, SACE, SCCCL, UF, and Frank Knapp, Jr. are collectively the "Parties" and each a "Party."

Alder Energy was represented by R. Taylor Speer, Esquire and Robert P. Mangum, Esquire; Vote Solar was represented by Thadeus B. Culley, Esquire and Bess J. DuRant, Esquire; SEIA was represented by Jeffrey W. Kuykendall, Esquire; NCSEA was represented by Jeffrey W. Kuykendall, Esquire and Peter H. Ledford, Esquire; SACE, SCCCL, and UF were represented by Katherine Lee Mixson, Esquire and David L. Neal, Esquire; and Frank Knapp, Jr. represented himself.

III. HEARINGS

1. Hearing on the Merits.

In order to hear testimony, receive documentary evidence, and consider the net energy metering ("NEM") tariffs proposed by DESC in this docket (collectively, the "Solar Choice

Tariffs"), the Commission convened a virtual hearing on this matter on February 23, 2021, in the hearing room of the Commission with the Honorable Justin T. Williams presiding as Chairman.

DESC presented the direct and rebuttal testimony of Daniel F. Kassis, General Manager of Strategic Partnerships & Renewable Energy for DESC; Margot Everett, Director for Guidehouse, formerly Navigant Consulting, Inc. ("Guidehouse"); and Scott Robinson, Associate Director in the Advanced Solutions Group at Guidehouse. DESC also filed direct testimony of Allen Rooks, Manager of Regulation for DESC. Exhibits were included with the direct testimony of Witnesses Kassis, Robinson, and Rooks. DESC submitted two late-filed exhibits requested by the Commission—Late Filed Exhibit No. 5, the Margin Compression Analysis submitted to the Arizona Corporation Commission and discussed by Witness Robinson in his live testimony, and Late Filed Exhibit No. 8, which provided information regarding the options that residential and commercial customers would have available to them when the current net energy metering tariffs expire.

The ORS filed the direct testimony of Robert A. Lawyer, Deputy Director of Energy Efficiency and Renewables in the Utility Rates and Services Division of the ORS. The ORS also filed direct and rebuttal testimony of Brian Horii, Senior Partner with Energy and Environmental Economics, Inc. ("E3"). Exhibits were included with the direct testimony of Witnesses Lawyer and Horii.

SCCCL, SACE, UF, Vote Solar, SEIA and NCSEA ("Solar Advocates") filed the direct and surrebuttal testimony of R. Thomas Beach, Principal Consultant of Crossborder Energy. Exhibits were included with the direct testimony of Mr. Beach.

NCSEA and SEIA (collectively, "NCSEA/SEIA") filed the direct and surrebuttal testimony of Justin R. Barnes, Director of Research with EQ Research, LLC. An exhibit was included with the direct testimony of Mr. Barnes.

SCCCL, SACE, and Upstate Forever (collectively, "SCCCL/SACE/UF") filed the surrebuttal testimony and exhibits of Eddy Moore, the Energy & Climate Program Director for SCCCL.

Alder Energy filed the direct and surrebuttal testimony of Donald R. Zimmerman, President and CEO of Alder Energy. Exhibits were filed with Witness Zimmerman's direct testimony. Alder Energy also filed under seal Late-Filed Exhibit No. 10, which contained information relative to certain solar proposals made by Alder Energy.

2. Virtual Public Hearing.

As discussed above, the Commission ordered that an additional hearing be held to receive testimony from the public. At oral argument on March 22, 2021, the Commission ruled that it would hear testimony from any individual who wished to speak, regardless of whether the individual was a DESC customer. The scheduled witness roster exceeded 250 witnesses.

The virtual public hearing commenced on March 23, 2021, and the Commission heard testimony from approximately 145 public witnesses well past midnight and into the early morning hours of March 24. On March 25, 2021, the Commission heard from 8 remaining public witnesses and responsive comments from the parties of record. In total, the Commission heard from more than 150 public witnesses during the virtual public hearing. However, it became quickly apparent to the Commission—either through questioning or via the witness's own admission—that a significant number of those public witnesses were not DESC customers or were affiliated with the solar industry or advocacy groups or both. Each of these witnesses had the same core request of the Commission—to reject the Solar Choice Tariffs in favor of a structure that would essentially continue the subsidization under the current NEM programs in the state (collectively, the "Current NEM Programs") to prop up the solar industry.

As for the testimony provided by actual DESC customers with rooftop, rather than those witnesses simply testifying on behalf of the solar industry, a troubling theme emerged regarding predatory rooftop leasing practices in South Carolina. Specifically, several customers testified that the leases they entered into with the solar developer included at least 20-year terms. However, the NEM programs offered by DESC and approved by the Commission are available to customers for a ten-year period, at most. For example, pursuant to the Settlement Agreement approved by this Commission in Order No. 2015-194 in Docket No. 2014-246-E, customers who applied for NEM could only maintain service under that rider until 2025, which is also specifically stated in DESC's Rider to Retail Rates – Second Net Energy Metering for Renewable Energy Facilities; and Act 62 specifically that customers taking service after the effective date of the act could only maintain service on that rider until 2029, which is also specifically stated in DESC's Rider to Retail Rates – Third Net Energy Metering for Renewable Energy Facilities. Although the rooftop solar developer will enjoy a guaranteed profit for the entire 20-year term, there is no similar guarantee that the customer will even be able to justify the expense of leasing a rooftop solar system once the Current NEM Programs expire. In some cases, the payments to the developer contain a percentage escalator—meaning that the payments to the developer are substantially more at the end of the lease than the beginning. This paints a very different picture of the economics under these leases toward the end of the term. On one hand, the developer enjoys an increased payment stream, while on the other, the customer has no guarantee whatsoever that the lease will continue to make sense from an economic perspective given the terms of the Current NEM Programs. Even more troubling is that public witnesses stated that they were not warned of the expiration of Current NEM Programs at the time they signed their lease—even though the rooftop developer had or certainly should have had knowledge of the same. Furthermore, one customer testified that his rooftop installer "told [him] so many lies" and affirmatively stated that he was "not the only elderly person who has been done this way." The customer testimony revealed the truth behind that statement, as another customer noted that she was 79 years old and that her husband had recently entered into a 20-year lease for solar panels before she could get his power of attorney put in her name—this testimony alone is enough to raise the concern of the Commission regarding aggressive rooftop leasing in South Carolina.

The Commission sincerely appreciates the customer testimony received at the virtual hearing, particularly those who waited patiently for their turn to testify, even if it meant staying awake well past midnight to provide testimony to the Commission. Although the Commission is troubled by the solar industry's efforts to "stack" the public witness list with individuals simply advocating on behalf of solar developers, it is more concerned with the revelations regarding rooftop leasing practices in South Carolina. Although the Commission does not have the authority to affect existing leases, the Commission strongly encourages the ORS to follow-up with the customers who provided testimony during the virtual hearing that they held leases in excess of twenty years for rooftop solar panels and exercise any of its powers under S.C. Code Ann. § 58-27-660 that it deems appropriate.[1]

[1] Specifically, S.C. Code Ann. § 58-27-2660(A) directs the ORS and the South Carolina Department of Consumer Affairs to develop consumer protection regulations with respect to the "sale or lease" of renewable energy generation

IV. PRELIMINARY MATTERS

1. Applicability of S.C. Code Ann. § 58-40-20(F)(2) and (G).

During the hearing, Commissioner Belser questioned the Parties as to whether the Solar Choice provisions contained in S.C. Code Ann. § 58-40-20(F)(2) and (G) applied to the Commission's consideration of these initial Solar Choice Tariffs.

S.C. Code Ann. § 58-40-20(F)(2) reads as follows:

> (2) In establishing any successor solar choice metering tariffs, and in approving any future modifications, the commission shall determine how meter information is used for calculating the solar choice metering measurement that is just and reasonable in light of the costs and benefits of the solar choice metering program.

(emphasis added).

S.C. Code Ann. § 58-40-20(G) reads as follows:

> (G) In establishing a successor solar choice metering tariff, the commission is directed to:
>
> > (1) eliminate any cost shift to the greatest extent practicable on customers who do not have customer-sited generation while also ensuring access to customer-generator options for customers who choose to enroll in customer-generator programs; and
> >
> > (2) permit solar choice customer-generators to use customer-generated energy behind the meter without penalty.

(emphasis added).

Commissioner Belser specifically requested the Parties to comment on the word "successor" and whether Act 62 intends the parameters found in (F)(2) and (G) to apply to future iterations of these tariffs rather than the initial versions proposed in this docket. In providing closing arguments, the

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facilities. The Commission understands that the ORS has proposed regulations which remain pending. Further, S.C. Code Ann. § 58-27-2660(B) authorizes ORS to enforce any applicable consumer protection provision by conducting an investigation, issuing a cease and desist order, imposing an administrative fine, and voiding agreements if necessary.

Parties generally agreed that these provisions apply to the Commission's consideration of the Solar Choice Tariffs given that if they did not apply, the net effect would be that DESC could implement tariffs that eliminated cost shift "to the greatest extent practicable," while penalizing customer-generators for consuming energy behind the meter.[2] Likewise, if (F)(2) and (G) did not apply to this proceeding, DESC would be permitted to file for a new NEM tariff immediately after establishment of tariffs in this proceeding, and the Commission *would* be bound by (F)(2) and (G) when considering those new tariffs. As DESC noted, well-settled principles of statutory interpretation in South Carolina require the Commission to interpret statutes in a way that would avoid such absurd results. *Ray Bell Constr. Co. v. School Dist. of Greenville Co.*, 501 S.E.2d 725 (1998). DESC also provided the Commission with helpful legislative history that further clarifies the "successor" language in (F)(2) and (G). The initial draft of Act 62 dated January 17, 2019—as shown on scstatehouse.gov—demonstrates that an initial draft of the statute referred to a "successor net energy metering tariff."[3] That strongly suggests that the use of the word "successor" was meant to apply to this proceeding in that the tariff proposed here is a successor to the existing NEM tariff.

After applying well-settled principles of statutory interpretation and reviewing the specific legislative history of Act 62, it is clear to the Commission that Sections (F)(2) and (G) were intended to apply to the Commission's consideration of the Solar Choice Tariffs in this docket. The Commission appreciates the Parties' efforts in clarifying this issue of statutory interpretation.

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[2] Similar cost-shift language appears in S.C. Code Ann. § 58-40-20(A), but this is the only section of Act 62 that prohibits penalizing behind-the-meter consumption.
[3] https://www.scstatehouse.gov/sess123_2019-2020/prever/3659_20190117.htm.

2. DESC's Motion to Recuse.

On February 26, 2021, DESC was compelled to file a Motion to Recuse Commissioner Ervin. Commissioner Ervin recused himself shortly thereafter.

V. STATUTORY STANDARDS AND REQUIRED FINDINGS OF FACT

1. Current NEM Programs.

The Current NEM Programs are a product of S.C. Act No. 236 of 2014 ("Act 236") and were developed via a Commission-approved settlement, which included DESC; Duke Energy Carolinas, LLC; Duke Energy Progress, LLC; Central Electric Power Cooperative, Inc. and The Electric Cooperatives of South Carolina, Inc.; SCCCL and SACE; the South Carolina Solar Business Alliance, LLC; Sustainable Energy Solutions, LLC; Solbridge Energy, LLC; The Alliance for Solar Choice; the Siena Club; and the ORS.

The Current NEM Programs were designed to incent and accelerate the deployment of customer-sited solar. The current NEM Programs have resulted in over 110 MW in the DESC service territory. Likewise, the Commission reviewed forecasts in a generic NEM docket (Docket No. 2019-182-E) (the "Generic Docket") that indicate solar is so firmly established in South Carolina that it is expected to grow well into the future, even under conservative estimates. As such, Act 236 and the Commission, through its implementation orders, helped establish a robust NEM program in South Carolina. However, neither Act 236 nor the implementation orders address certain of the NEM-related requirements in Act 62, such as the elimination of cost shift "to the greatest extent practicable." S.C. Code Ann. § 58-40-20(A)(3). Therefore, the Commission must necessarily move away from certain principles underlying the Current NEM Programs to achieve the requirements of Act 62. South Carolina, like many jurisdictions that were early, successful adopters of NEM programs, seeks to implement more sophisticated rate-making tools to better align cost and benefits and avoid growing cost shifts to non-participants.

2. Background of Act 62.

The General Assembly, through Act 62, directed the Commission to address all renewable energy issues—including NEM programs—"in a fair and balanced manner." S.C. Code Ann. § 58-41-05. With respect to renewable energy issues related to solar generation and distributed energy resources, the General Assembly's specific intent was to:

> (1) build upon the successful deployment of solar generating capacity through Act 236 of 2014 to continue enabling market-driven, private investment in distributed energy resources across the State by reducing regulatory and administrative burdens to customer installation and utilization of onsite distributed energy resources;
>
> (2) avoid disruption to the growing market for customer-scale distributed energy resources; and
>
> (3) require the commission to establish solar choice metering requirements that fairly allocate costs and benefits to eliminate any cost shift or subsidization associated with net metering to the greatest extent practicable.

S.C. Code Ann. § 58-40-20(A).

As detailed in clause (3) above, Act 62 requires the adoption of an NEM successor program known as "Solar Choice Metering."

Although Act 62 contained this specific directive for the Commission to establish new NEM programs, Act 62 also directed the Commission to undertake a review of the Current NEM Programs. To fulfill that directive, the Commission established the Generic Docket to investigate the Current NEM Programs. The Generic Docket required a critical examination, through a contested proceeding, of the Current NEM Programs and corresponding methodology such that the Commission and the various parties could gather NEM best practices from around the country and "lessons learned" from the Current NEM Programs to leverage when developing Act 62's next generation of NEM—the Solar Choice Program. The analysis presented in the contested Generic Docket is important because Act 62 contains new mandates related to NEM that were not previously required in South Carolina—such as eliminating cost shift and subsidization "to the greatest extent practicable" and a consideration of "time-variant rate schedules." S.C. Code Ann. § 58-40-20(G)(1); S.C. Code Ann. § 58-40-20(F)(3)(b). The investigation conducted in the Generic Docket and the conclusions derived therein provide a toolset with which to address these new mandates. However, in addition to the Generic Docket investigation, the General Assembly continued further and set forth specific requirements for Solar Choice, compliance with which ensures fulfillment of the statutory intent. The Commission, consistent with the requirements of Act 62, established separate, utility-specific dockets to hear testimony, consider utility-sponsored proposals, and establish solar choice metering tariffs for applications received after May 31, 2021, consistent with the mandates of Sections (F), (G), and (H) of S.C. Code Ann. § 58-40-20. The Commission fulfills the General Assembly's intent by adhering to these specific requirements as set forth in Act 62.

(a) Section (F).

S.C. Code Ann. § 58-40-20(F)(1) expressly requires the Commission to establish a "solar choice metering tariff" for NEM applications received after May 31, 2021. This section goes on to echo the plain language of S.C. Code Ann. § 58-40-20(A), above, by focusing upon an alignment of the costs and benefits within the Solar Choice Tariffs:

> (2) In establishing any successor solar choice metering tariffs, and in approving any future modifications, the commission shall determine how meter information is used for calculating the solar choice metering measurement that is just and reasonable in light of the costs and benefits of the solar choice metering program.

Section (F)(3) goes on to outline specific items which the Commission must consider in this docket:

> (3) A solar choice metering tariff shall include a methodology to compensate customer-generators for the benefits provided by their generation to the power system. In determining the appropriate billing mechanism and energy measurement interval, the commission shall consider:
>
> > (a) current metering capability and the cost of upgrading hardware and billing systems to accomplish the provisions of the tariff;
> >
> > (b) the interaction of the tariff with time-variant rate schedules available to customer-generators and whether different measurement intervals are justified for customer-generators taking service on a time-variant rate schedule;
> >
> > (c) whether additional mitigation measures are warranted to transition existing customer-generators; and
> >
> > (d) any other information the commission deems relevant.

Upon review, it is clear that S.C. Code Ann. § 58-40-20(F) requires the Commission to approve time intervals and export values that accurately align costs with benefits, and specifically directs the Commission to consider time-variant rate schedules—which were identified by several parties in the generic docket as a way to achieve the alignment of costs and benefits required by Act 62.

(b) Section (G).

S.C. Code Ann. § 58-40-20(G) echoes the cost-shift language found in S.C. Code Ann. § 58-40-20(A), but elaborates upon that language to identify the customers with which the General Assembly is specifically concerned when it comes to cost shift:

> (G) In establishing a successor solar choice metering tariff, the commission is directed to:
>
> > (1) eliminate any cost shift to the greatest extent practicable on customers who do not have customer-sited generation while also ensuring access to

> customer-generator options for customers who choose to enroll in customer-generator programs; and
>
> (2) permit solar choice customer-generators to use customer-generated energy behind the meter without penalty.

The General Assembly, through the detailed requirements and actions listed in Act 62, took great care to pave a path for compliance with its legislative intent. Moreover, these provisions evidence the General Assembly's concern for a Solar Choice[4] program that is fair to all customers. By directing the Commission to ensure that non-solar customers do not bear unwarranted cost shift from these Solar Choice programs, while at the same time prohibiting the imposition of penalties on Solar Choice customers, the General Assembly directs this Commission to not only consider the Solar Choice program's impact to Solar Choice customers, but also the much larger contingent of non-Solar Choice customers in DESC's service territory.

(c) Section (H).

Finally, S.C. Code Ann. § 58-40-20(H) directs the Commission to "establish a minimum guaranteed number of years to which solar choice metering customers are entitled" to take service under the Solar Choice Tariffs.

3. Components of Solar Choice Tariffs.

The Solar Choice Tariffs proposed by DESC in this docket include an offering for non-residential and residential customers. Each of the tariffs include a cost-based Basic Facilities Charge ("BFC") as well as a subscription fee for renewable generators based upon their system size, a minimum subscription fee, time of use ("TOU")-based energy charges, and time-based avoided cost credits.

[4] The successor customer generator program to net energy metering.

For residential customers:

- The proposed BFC charge is $19.50 per month.
- The proposed Subscription Fee is $5.40 per kW of installed renewable generation capacity. The Solar Choice Tariff also includes a minimum monthly Subscription Fee of $16.20, which is based upon a system size of 3 kW multiplied by the amount of the Subscription Fee listed above.
- The tariff includes TOU periods, with on-peak hours of 5:00 A.M. to 9:00 A.M. during winter months (December through February) and 4:00 P.M. to 8:00 P.M. during summer months (June through September). The proposed energy charges are $0.18417 per kWh for on-peak winter; $0.16749 per kWh for on-peak summer; and $0.06735 per kWh for all off-peak charges, to include weekends and holidays. DESC measures both inflows and outflows of power on a 15-minute interval basis. These 15-minute measurements are then aggregated within the month by TOU billing period. The applicable rate, as outlined in the Solar Choice Tariff will then be applied to those cumulative amounts by TOU period for both customer usage and exports.
- DESC is also proposing time-based avoided energy credits for exported power.[5]

For DESC's Small General Service customers, DESC proposes a tariff structure similar to its residential offering, but with charges that more closely reflect the cost to serve this customer class. This Small General Service tariff includes:

[5] DESC notes that since the changes (regarding time differentiation of avoided energy credits and line losses) proposed by Witness Everett in the Generic Docket have not yet been approved, DESC used the NEM Methodology Value of $0.03522/kWh and supporting inputs approved by the Commission in Order No. 2020-244 in Docket No. 2019-184-E in all analyses conducted in the development of its Solar Choice Tariff proposals.

- A proposed BFC charge of $32.50 per month.
- A proposed Subscription Fee of $6.50 per kW of installed renewable generation capacity. The tariff also includes a minimum monthly Subscription Fee of $48.75, which is based upon a system size of 7.5 kW multiplied by the amount of the Subscription Fee listed above.
- TOU periods, with on-peak hours of 5:00 A.M. to 9:00 A.M. during winter months (December through February) and 4:00 P.M. to 8:00 P.M. during summer months (June through September). DESC measures both inflows and outflows of power on a 15-minute interval basis. These 15-minute measurements are then aggregated within the month by TOU billing period. The applicable rate, as outlined in the Solar Choice Tariff will then be applied to those cumulative amounts by TOU period for both customer usage and exports.
- Time-based avoided energy credits for exported power.

Each of these Solar Choice Tariffs would be available for customers submitting applications after May 31, 2021. DESC also proposes a mechanism by which customers under the Current NEM Programs can transition to these new Solar Choice Tariffs. *See* Rooks Direct Testimony at 3. Specifically, existing customers taking service under DESC's Rider to Retail Rates – Second NEM for Renewable Energy Facilities can continue to do so through December 31, 2025. *See id.* at 3. At that time, these customers would have the option to transition to the Solar Choice Tariffs. *See id.* at 4. Likewise, customers taking service under DESC's Rider to Retail Rates – Third NEM for Renewable Energy Facilities may continue to receive service under its terms through May 31, 2029. *See id.* at 4. At that time, these customers would have the option to transition to the Solar Choice Tariffs. *See id.* at 4.

VI. EVIDENCE OF RECORD AND RESULTING FINDINGS OF FACT[6]

As described above, Act 62 contains express requirements of this Commission when considering these Solar Choice Tariffs. By adhering closely to these tenets within Act 62, the Commission fulfills the General Assembly's intent.

1. S.C. Code Ann. § 58-40-20(F)

(a) Effective for Applications Received After May 31, 2021.

Act 62 requires the Commission to approve new Solar Choice tariffs for applications received "after May 31, 2021." S.C. Code Ann. § 58-40-20(F)(1). Witness Rooks noted that DESC intends to implement the tariffs approved by the Commission in this docket in accordance with Act 62, with applications received on or after June 1, 2021, being able to take service under the new tariffs. *See* Rooks Direct Testimony at 3. Act 62 also provides a glidepath to transition for customers under Current NEM Programs. S.C. Code Ann. § 58-40-20(F)(3)(C). As described by Witness Rooks, customers currently taking service under DESC's Rider to Retail Rates — Second NEM for Renewable Energy Facilities can continue to do so through December 31, 2025. *See* Rooks Direct Testimony at 4. Customers taking service under DESC's Rider to Retail Rates — Third NEM for Renewable Energy Facilities can take service under that rider until May 31, 2029. *See id.* at 4.

Although the intervenors agreed that the tariffs proposed in this docket should be effective by June 1, 2021, in accordance with Act 62, the intervenors argued that, among other things, the

[6] To the extent these findings are conclusions of law, they are adopted as such.

implementation of DESC's TOU rates under the tariffs should be delayed until these customers have access to 12 months of granular usage data. *See* Barnes Direct Testimony at 7. Witness Beach, testifying on behalf of SCCCL, Southern Alliance, UF, Vote Solar, SEIA, and NCSEA, suggested that that the Commission should wait until DESC's rollout of advanced metering infrastructure ("AMI") is completed prior to implementing TOU rates under the tariffs to ensure customers are able "to understand and to evaluate such investments." Beach Direct Testimony 14:4 – 14:5. Witness Barnes, testifying on behalf of NCSEA and SEIA, noted that customers may not "have the proper information and tools to respond to a TOU rate design" without this 12-month usage data. Barnes Direct Testimony 79:23 – 80:1. In requesting a similar delay in TOU rates, Witness Zimmerman, testifying on behalf of Alder Energy, turned the focus away from customers and to Alder Energy's ability to project ROI and payback. *See* Zimmerman Direct Testimony at 16. Alder Energy alleged that without such data, "Alder could not effectively model/project anticipated ROI and payback period." *Id.* at 16:10 – 16:11. On the other hand, the ORS did not request a delay in implementation of DESC's proposed TOU rates and noted that "the introduction of TOU energy rates that better reflect the variation in the costs of delivering energy over the course of a day" aided in reduction of the cost shift. Horii Direct Testimony 11:12 – 11:13. Furthermore, the ORS testified that this rate structure represents one "hallmark of an ideal Solar Choice Metering Tariff." *Id.* at 5:16 – 5:17.

DESC Witness Kassis described this coordinated effort on the part of the intervenors as simply a "delay and diversion tactic" that is not based upon the principles within Act 62. Kassis Rebuttal Testimony 21:19. Witness Kassis noted that this attempt to yet again maintain the status quo for NEM in South Carolina mischaracterizes the tariffs. *See id.* at 22. Witness Kassis is clear that any new customers would have the option to apply to these tariffs rather than simply being "hoisted upon new TOU rates without warning." *Id.* at 22:11. He also noted that this issue does not affect existing customers given that they can maintain service under their existing tariffs until at least December 31, 2025, and as late as May 31, 2029. *See id.* at 22. Witness Kassis stated that Witness Zimmerman's concerns related to project modeling are even further from the principles of Act 62 than the other intervenors given that Alder Energy's concern lies squarely within its ability to pitch projects, rather than focusing on the customer-centric principles within Act 62. *See id.* at 13. DESC Witness Everett drew upon her experience across the country and noted that she is "unaware of any jurisdiction that requires customers to have a year's worth of usage data <u>prior to even implementing an optional TOU rate</u>." Everett Rebuttal Testimony 28:19 – 28:20. (emphasis in original). Even if customers were provided with such data, Witness Everett noted that adapting to TOU rates is really not about historical data, rather, it requires "information about potential behavioral changes in the future to manage their energy use consistent with TOU rate designs." *Id.* at 29:2 - 29:3. Witness Everett argued that, rather than granular historical data simply broken down by time period, the information beneficial to customers moving to TOU Rates "is to teach them about [the new TOU rate structure]and teach them to . . . be mindful about when you consume electricity and move your electricity from those peak periods." Tr. 286.9 – 286.13.[7]

There was very little response to DESC's claims of the futility of such data and the novelty of such request. However, Witness Zimmerman attempted to rehabilitate the developer-centric focus of Alder Energy's request by painting it as a "consumer protection issue." Zimmerman Surrebuttal Testimony 4:15 – 4:16.

[7] Given the time constraints imposed by Act 62 and the voluminous testimony taken at hearing, all citations to the hearing transcript refer to the Scoped Draft that was provided to the Parties in the interest of time.

Although the intervenors dispute the terms of the tariff that will take effect on June 1, 2021, there is no dispute that the tariffs approved by this Commission will be effective for applications received on or after June 1, 2021, in accordance with Act 62. However, the Commission must now address the request of the intervenors to delay implementation of TOU rates under the Solar Choice Tariffs until a year's-worth of usage data is provided to customers. Initially, the Commission is guided by the principles within Act 62. Although Act 62 expressly directed the Commission to consider "time-variant" rates, it did not contain any requirement—express or implied—that obtaining historical usage data is a condition precedent to implementation of such rates. Given the various, specific Solar Choice Metering related requirements within Act 62, it is reasonable to assume that if that was the General Assembly's intent, it would have included language indicating the same. In short, there is simply no support within Act 62 for such request, and the record does not indicate that there is support for this request in any other jurisdiction across the country. Rather, the Commission believes that this request is yet another attempt to maintain the solar-favorable economics under the Current NEM Programs, which result in the cost-shift the General Assembly sought to eliminate to the greatest extent practicable.

As the Commission has noted time and again, Act 62 does not call the Commission to maintain the status quo, but calls it to usher in the next generation of Solar Choice. As for the intervenors' specific concerns, the Commission is at a loss as to how historical data will be any more useful to customers than the express TOU periods in the Solar Choice Tariffs. No matter historical behavior, customers always have the option to adjust power consumption in accordance with the TOU periods in the tariffs. The Commission finds Alder Energy's position particularly troublesome given that Act 62 does not mention, at all, any concerns related to the ability of solar developers to model projects. The Commission finds Alder Energy's efforts to re-characterize its position in surrebuttal testimony as a "consumer protection" stance disingenuous. Likewise, commercial customers already take service under a more complex rate structure than residential customers, and the Commission sees no reason why Alder Energy would be able to model those complex rate structures, but not a TOU rate. Considering Act 62's express language regarding time-variant rates, in conjunction with the complete lack of support within Act 62 for the intervenors' request to maintain the status quo, reveals that it is appropriate to implement DESC's proposed TOU rate structures within the tariffs for applications received on or after June 1, 2021.

(b) Solar Choice Metering Measurement and Methodology.

S.C. Code Ann. § 58-40-20(F)(3) requires the Commission to establish a solar choice measurement interval and corresponding methodology to compensate customer-generators for their power. The Commission will address each below.

1. Solar Choice Metering Measurement.

Act 62 enumerates certain factors the Commission must consider when establishing the measurement interval, which include:

> (a) current metering capability and the cost of upgrading hardware and billing systems to accomplish the provisions of the tariff;
>
> (b) the interaction of the tariff with time-variant rate schedules available to customer-generators and whether different measurement intervals are justified for customer-generators taking service on a time-variant rate schedule;
>
> (c) whether additional mitigation measures are warranted to transition existing customer-generators; and
>
> (d) any other information the commission deems relevant.

Additionally, keeping with Act 62's core theme of aligning costs with benefits under the Solar Choice Tariffs, S.C. Code Ann. § 58-40-20(F)(2) requires the Commission to "determine how meter information is used for calculating the solar choice metering measurement that is just and reasonable in light of the costs and benefits of the solar choice metering program." As described by Witness Everett, this measurement or "netting" interval is the "primary distinction of an NEM program." Everett Direct Testimony 8:3. This feature allows customers to "net" the total energy produced by the customer-generator against the customer's load during a prescribe period. *See id.* at 8. Witness Everett noted that this feature also permits customers to offset energy during hours when their generator is not operating, resulting in no payment to the utility for energy delivered as a result of "banked" exports. *Id.* at 8. Witness Everett explained that the Current NEM Programs contain an annual netting period, which means that customers can offset energy generated in December with energy self-generated and "banked" the prior March. *Id.* at 8. Witness Everett indicated that the Solar Choice Tariffs contain a new, innovative best-practice called "net billing." *Id.* at 5.

Under net billing, the netting intervals are typically an hour or less, and are compensated separately for exports. *See id.* at 5. Witness Everett confirmed that this net billing would govern exports, but customers will still receive a 1:1 offset credit for energy consumed behind the meter. *See id.* at 5. In accordance with Act 62's directive to consider time-variant rate structures when establishing the netting interval, Witness Everett noted that not only will customers be able to take advantage of time-variant rate structures for electricity supplied by DESC, but also for power exported to DESC given that the net billing structure permits customers to net within TOU periods and get the corresponding TOU rate for the power put to the grid. *See id.* at 25. Witness Everett explained that this net billing arrangement represents a best-practice in NEM ratemaking, and that "[m]any states, such as Hawaii, Arizona, Alabama, Indiana, and New Hampshire" have moved to net billing. *Id.* at 5:6 – 5:7. Likewise, Witness Everett cited a 2018 study by GRIDWORKS which described net billing as "an improvement to NEM with respect to several criteria, including providing customer choice, advancing decarbonization, and recovering grid costs." *Id.* at 5:11 – 5:13.

Witness Rooks explained that the Solar Choice Tariffs utilize this net billing arrangement based upon 15-minute interval data over the hour. *See* Rooks Direct Testimony at 8.[8] DESC Witness Rooks noted that—as directed by Act 62—DESC did consider whether it had the metering capability to implement this new TOU structure. *See id.* at 11. Witness Rooks cited an ongoing project in DESC's service territory to implement AMI that will aid in DESC's administration of the Solar Choice Tariffs. *See id.* at 11. Witness Rooks explained that with DESC's current metering capability and the rollout of AMI meters, no further billing or hardware upgrades will need to be made as a result of the Solar Choice Tariffs. *See id.* at 11. In response to Act 62's call to consider whether additional mitigation measures are warranted to transition existing customer-generators, Witness Rooks explained that additional measures are not needed given that existing customers can remain on their current tariff until at least 2025, which means that full payback could be achieved for those customers even prior to the time they would have the option to transition to a Solar Choice Tariff. *See id.* at 5.

[8] Under this arrangement, the energy generated by the solar facility in excess of the customer-generator's demand profile is exported to the grid and compensated at the avoided cost rate for such energy. Conversely, where the customer generator consumes electricity from the utility during the 15-minute interval such energy is charged at the current retail rate corresponding to that TOU period.

Witness Beach's testimony seems to conflict with Witness Rook's characterization of the Solar Choice Tariffs' hourly net billing arrangement based upon 15-minute interval data over the hour because he described the netting arrangement within the Solar Choice Tariffs as "15-minute netting." Beach Direct Testimony at 26:8. Witness Beach noted that this shortened netting period is unnecessary and that the status quo of annual netting should be maintained. *See id.* at 35. Additionally, Witness Beach's proposed Joint Solar Choice Tariff restricts the crediting mechanism in a way that would permit on-peak generation to be credited only against subsequent on-peak consumption, even if this means rolling credits over month-to-month. *See id.* at 16. Witness Barnes similarly took issue with DESC's chosen netting period, and characterized it as a disfavored "avoided cost export credit regime" that is contrary to best practices across the country. Barnes Direct Testimony 29:22. Witness Barnes proposed several alternatives to the Commission—including monthly netting—but ultimately echoed the testimony of Witness Beach in keeping with the status quo by opining that this Commission should maintain the status quo of annual netting, with a modification to net by TOU periods. *See id.* at 31. Witness Zimmerman explained the economics of netting, noting that longer periods permit customer-generators to accumulate more credits, which results in more money for these customer-generators because they have opportunities—over the course of an entire year under Current NEM Programs—to utilize those credits to offset power required from DESC. *See* Zimmerman Direct Testimony at 8. These shorter netting periods, as alleged by Witness Zimmerman, would "discourage larger investments in DG systems," and describes Act 62 as lending no support to the idea of hourly netting. *Id.* at 8:3 – 8:4. As discussed in greater detail below, all intervenors argued to maintain the status quo in some way—whether retaining annual netting or providing a value that at least equals the retail rate for export credits. *See* Barnes Direct Testimony at 27; Beach Direct Testimony at 13; Zimmerman Direct Testimony at 16; Moore Surrebuttal Testimony at 20.

However, Witness Horii noted that the netting regime under the Current NEM Programs is a primary driver of the cost shift under the Act 236 programs. *See* Horii Direct Testimony at 6. Witness Horii went on to describe DESC's "net billing" arrangement as a "clean separation of how customers generated solar energy is credited" by providing a 1:1 retail offset for energy consumed behind the meter, and an export credit for energy exported to the grid. *Id.* at 7:4 – 7:5.

DESC Witness Everett argued that Witness Barnes' suggestion to move to TOU retail netting on an annual basis simply misunderstands the point—the annual netting mechanism combined with retail export credits only exacerbates the cost shift. Everett Rebuttal Testimony at 33. Witness Everett noted that Witness Beach's "roll over" approach to valuing exports has been used in other jurisdictions, but simply violates the principles of Act 62 because it still assumes that exports should be valued at retail rates—a "status quo" approach endorsed by all solar intervenors. *See id.* at 17. Witness Everett opined that, from DESC's perspective, exported generation is not equal to the retail rate and such a compensation scheme only compounds the cost shift. *See id.* at 17. Witness Everett agreed with Witness Zimmerman that longer netting would permit more "banking," but noted that these longer netting periods run contrary to the key requirement in Act 62 to eliminate cost shift to the "greatest extent practicable." *Id.* at 31:1. Witness Everett contrasted Witness Zimmerman's approach with the net billing concept proposed by DESC. *See id.* at 31. Witness Everett argued that by valuing export credits at the avoided cost rates under a net billing mechanism, the Solar Choice Tariffs provide a "far more cost-reflective approach to accommodating uncontrolled intermittent generation from customer-generators than Witness

Zimmerman's preferred annual netting period where exports are arbitrarily valued at retail rates." *Id.* at 31:6 – 31:8. Essentially, Witness Everett explained that the longer the netting period, the further the tariff moves from the cost-causation principles within Act 62. *See id.* at 31. As for Witness Zimmerman's allegation that there is "no support" for hourly netting within Act 62, Witness Everett noted that support for hourly netting runs throughout Act 62 given its core requirements of aligning costs and benefits under NEM programs. *See id.* at 31. Likewise, Witness Kassis argued that Witness Zimmerman's statement is simply a mischaracterization of Act 62 and "would continue the same subsidies and cost shifts which Act 62 expressly cautions against and maintain the status quo in South Carolina." Kassis Rebuttal Testimony 21:10 – 21:11.

Witness Moore, testifying on behalf of SCCCL, Southern Alliance, and UF, took a different approach to argue for the status quo annual netting periods by alleging that "the evidentiary basis for establishing a new, just, and reasonable netting period, in compliance with Act 62, does not exist." Moore Surrebuttal Testimony 21:2 – 21:4. Witness Moore suggested that a cost-benefit analysis is required to make any such determination. *See id.* at 20.

Contrary to Witness Moore's assertion, DESC not only provided sound, comprehensive analysis in this docket, but also in the Generic Docket. The cost-benefit analysis in that docket revealed that the annual netting under Current NEM Programs leads to a substantial cost shift to non-NEM customers, and DESC has provided analyses not only supporting a substantial reduction in cost shift as a result of the new Solar Choice Tariffs, but also evidence that these tariffs utilize best practices from around the country. Likewise, the record in the Generic Docket and this docket reveal that the TOU rates and "net billing" arrangement utilized by DESC represent best-practices that have been utilized across the country to better align rates with the cost to serve NEM customers. The Commission has more than enough information in the record to justify a move away from the status quo under Act 236, which is supported by the principles throughout Act 62. Although the intervenors each argue, via one route or another, to keep annual netting, the Commission finds that doing so would violate Act 62 by continuing the cost shift that exists under Current NEM Programs. As echoed by Witness Horii, this net billing concept provides a "clean separation" between the export credit regime and the 1:1 offset that customers maintain for on-site consumption.

As for mitigation measures for existing customers, those customers can maintain service under their current rate schedules until at least December 31, 2025. The Commission notes that this glidepath for existing customers is particularly important in this proceeding given that the Solar Choice Tariffs contain new and innovative rate structures that simply are not present under the Current NEM Programs. As discussed above, this is partly because Act 62 requires a more accurate alignment of costs and benefits of NEM programs than did Act 236. Certainly, customers under Current NEM Programs do not have to take service under the Solar Choice Tariffs at the time the Current NEM Programs expire and could choose one of DESC's other customer-generator options, such as Offset Only or Buy All/Sell All. This path to transition reflects an appropriate level of gradualism and ensures that existing customers have a number of years to make an informed decision about their next steps once the Current NEM Programs expire. Therefore, the Commission holds that the net billing arrangement proposed by DESC—which utilizes best practices to align rates with the cost to serve these customers—fulfills Act 62.

2. Methodology to Compensate Customer-Generators.

As described above, Act 62 also requires the Commission to establish "a methodology to compensate customer-generators for the benefits provided by their generation to the power system." Witness Everett highlighted two primary ways by which customers are compensated for their generation under the Solar Choice Tariffs—the rate design and the avoided cost export credit.

As for the rate design, Witness Everett noted that the Subscription Fee within the Solar Choice Tariffs actually "includes the value of the self-generation as a credit . . . and thus scales with the size of the system as does the subscription." Everett Direct Testimony 52:5 – 52:6. By design, the Subscription Fee incorporates a "credit" for the costs avoided by DESC as a result of the customer's on-site consumption—resulting in a lower Subscription Fee. *See id.* at 43. According to Witness Everett, this credit ensures that, in part, customer-generators are compensated for their generation from a rate-design perspective. *See id.* at 43.

As for the avoided cost export credit, Witness Everett explained that tying the credit to Commission-determined avoided costs for solar energy more accurately reflects the actual benefits provided to the DESC system and eliminates one of the primary drivers of cost shift under the Current NEM Programs—banking cost shift that results from overvaluing exports at an inflated retail rate. *See id.* at 19. Witness Everett noted that the banking cost shift is prevalent under Current NEM Programs given that DESC must purchase exported power from these customer-generators at a retail rate, "which is greater than the cost DESC avoids . . . in some cases by a large margin." *Id.* at 19:7 – 19:9. Witness Everett estimated this cost shift to be $475 per year per residential customers and $1,158 for small general service customers under the Current NEM Programs. *See id.* at 19. Witness Everett opined that the most effective way to eliminate this banking cost shift is to tie to values paid for exports to the actual value provided to the DESC system—in other words, valuing exports at DESC's avoided cost rates. *See id.* at 21. Witness Kassis further described these avoided cost rates as the rates established by the Commission in Docket No. 2020-244. *See* Kassis Direct Testimony at 14. These are the same rates that DESC pays to Qualifying Facilities (each, a "QF") under PURPA for power produced and exported to DESC. *See id.* at 14. Witness Kassis noted that valuing exports from QF rooftop solar customers under NEM in a similar manner is particularly appropriate given that utility-scale QFs produce the exact same resource, which provides the same value to the DESC system. *See id.* at 14. For example, whether from a utility-scale generator or a rooftop NEM customer, the DESC system simply takes intermittent, variable solar in either scenario, which results in the same benefits to the DESC system. *See id.* at 15. According to Witness Kassis, it makes no sense to value these separately (i.e., a retail rate for rooftop customers) given that the effect on the DESC system is identical. *See id.* at 15. Witness Kassis noted that, therefore, although DESC utilized the 11-component methodology from the Current NEM Programs as a baseline, the values input into the methodology were taken from the avoided cost rates paid to renewable generators under PURPA. *See id.* at 14. As for calculating the export credit paid to each customer, Witness Everett noted that the avoided costs are averaged to the same TOU periods within the tariffs, which means that customers can respond to pricing signals to not only decrease their electric bill, but also maximize their export credit. *See* Everett Direct Testimony at 46.

Witness Beach also argued that other benefits currently not approved by the Commission should be included in the rates paid to customer generators for their exports, including "public health improvements." *See* Beach Direct Testimony at 25. Witness Barnes claimed that—contrary to the evidence from other jurisdictions presented by DESC—an avoided cost export regime is not a best practice, and suggests maintaining the status quo retail credit with the slight modification of TOU netting. *See* Barnes Direct Testimony at 29. Although Witness Barnes provided several other approaches that involved rates other than an avoided cost export credit, he did concede that an avoided cost credit like that proposed by DESC is "fairly common." *See id.* at 31. Witness Zimmerman alleged that the avoided cost credit means that commercial customer-generators could receive "negative solar savings." Zimmerman Direct Testimony 14:17.

However, Witness Horii noted that DESC's "termination of full retail credits" is one of the primary factors in reducing the cost shift in accordance with Act 62. Horii Direct Testimony 11:11. Specifically, Witness Horii explained that the retail rate "is far larger than the avoided cost value provided by those exports," which results in a large cost shift, which occurs under the Current NEM Programs. *Id.* at 6:20.

Witness Kassis echoed Witness Horii's characterization of the retail rate, and noted that "this avoided cost structure has long been recognized as a way to accurately capture the value of generation exported to the utility . . . for other, similar renewable energy generators." Kassis Rebuttal Testimony 6:5 – 6:8. Witness Kassis claimed that the concept of crediting generators at the retail rate for their power is a concept that is unique to the NEM context in South Carolina and represents principles of Act 236 that are simply not present within Act 62. *See id.* at 6. Specifically, accurately valuing these exports at the avoided cost rate not only reduces the cost shift, but utilizes long-accepted, market-driven principles. *See id.* at 6. Witness Everett characterized the retail rate credit under Act 236 as "overly simplistic, and now outdated." Everett Rebuttal Testimony 8:19. Witness Everett noted that paying these rooftop customers anything other than avoided costs for their exported power could mean that the "costs of receiving and absorbing those exports can add to the overall costs to serve an NEM customer" resulting in additional costs that must be recouped from non-NEM customers. *Id.* at 10:20 – 11:1. Witness Everett stated that the avoided cost credit and rate structure, in conjunction, encourages customers to "install systems that maximize behind the meter self-consumption versus total generation" rather than to simply overbuild to guarantee a payment stream from the utility. *Id.* at 25:6 – 25:7. This results in a right-sizing of customer-generator systems that benefits the DESC system as a whole. *See id.* at 25. Likewise, Witness Everett argued that Witness Beach's approach greatly overestimates the value of these solar exports to the DESC system and assumes that DESC "is projected to charge, on average, far less than its costs over the next 25 years . . . a position that basic logic cannot support." *Id.* at 35:10 – 35:11. Witness Everett explained that Witness Beach's preferred approach would mean that DESC would be paying rates for exports that exceed not only current avoided costs, but also the current retail rates.[9] *See id.* at 35. Witness Everett noted that Witness Beach justifies the inflated values paid to customer-generators by including "hypothetical" benefits that "are simply too difficult to quantify to have any real effect on rates, and certainly should not be used to justify an increased cost shift in order to prop up the solar industry." *Id.* at 38:11 – 38:12. Witness Everett opined that such an inflated value would ultimately result in "higher rates for non-participating customers." *Id.* at 32:8. Finally, Witness Everett characterized Witness Barnes' proposal as simply maintaining

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[9] Witness Moore supports Witness Beach's theory that the costs a utility can avoid can exceed the rates it charges to its customers and noted that "in theory it's possible for a customer to provide enough benefit to the system that it roughly equals their cost of service, or even exceeds it. I mean, if you imagine a customer, for instance, that put energy onto the grid at each of the company's peaks and didn't take much energy off in the non-peak period, that customer could actually be net-positive. Tr. 863:5 – 863:12. Witness Moore also explained that "electricity is really undervalued, right? If your power goes out, you're not willing to pay 12 cents a kilowatt-hour to get it back; you'd pay 100 bucks." Tr. 853:20 – 853:23.

the status quo under Act 236, with the addition of TOU rates, which are expressly contemplated within Act 62. *See id.* at 36.

Witness Beach argued that the ORS and DESC fail to include "avoided costs associated with decarbonizing South Carolina's electric system." Beach Surrebuttal Testimony 4:16 – 4:17. Witness Beach noted that, even though the Commission has not approved any of these societal benefits in its avoided cost rates, that they are far from "hypothetical." *See id.* at 19. Witness Beach also argued that the ORS and DESC should have used non-zero values for marginal or avoided transmission and distribution ("T&D") costs, while acknowledging that the Commission has not adopted non-zero values for these components of the methodology. *See id.* at 13. Witness Barnes largely agreed with Witness Beach on this issue, and argues that the PURPA avoided cost framework simply ignores certain "long-term value associated with benefits such as avoided transmission and distribution investments." Barnes Surrebuttal Testimony 7:19 – 7:20.

Although the testimony received by the parties on the topic of export credits covered a wide range of topics, the testimony can be distilled into a succinct question—should the Commission utilize values that have been vetted and approved by the Commission for renewable generation, or should the Commission swing to the other extreme to utilize values that have never been approved in South Carolina and have never been quantified? The former is the most appropriate approach in this proceeding. The intervenors seem to advocate that retail rate export credit simply reflects an inherent value of solar to the DESC system. However, this approach simply ignores the realities of Act 236, which employed the retail rate credit to inflate benefits of rooftop solar in order to incentivize rooftop solar adoption and is one of the two primary drivers of the current cost shift. To be clear, the retail rate credit is more an economic incentive than an accurate reflection of solar. To find rates actually tied to the value of solar, the Commission agrees with DESC and the ORS that one should look to DESC's Commission-approved avoided cost values. Those values represent the Commission's adoption of rates that reflect the actual costs that DESC can avoid incurring by taking a kWh of solar energy from solar generators. In establishing those rates, the Commission reviews voluminous testimony in a contested proceeding about the components that should be included in the avoided cost methodology and the values that should be placed upon those components, and those values are updated annually in DESC's annual fuel proceeding.[10] The purported societal and long-term benefits that the intervenors attempt to incorporate into the export credit are simply inappropriate. Even more inappropriate is the intervenors' attempt to bypass the avoided cost docket and proffered beneficial theories that were never quantified by the Commission. Any such new components would simply exacerbate the cost shift borne by non-Solar Choice customers. Any such new components or inflated export rates would simply exacerbate the cost shift borne by non-Solar Choice customers, and as such is particularly inappropriate in this context because it would be in direct contradiction with Act 62. This structure has the added benefit of incentivizing appropriately sized systems, which is a benefit that will inure to all customers. Although the intervenors once again argue to keep the status quo by overvaluing solar exports, the Commission is guided by the new direction provided by Act 62. As such, the Commission finds that providing avoided cost credits to customer-generators more accurately aligns costs with benefits and appropriately values customer-generated power, thereby reducing the cost shift arising from "banking" cost shift in accordance with Act 62.

[10] Indeed, the values for the components of the Commission-approved methodology for valuing solar are at issue in the pending Docket No. 2021-2-E.

2. S.C. Code Ann. § 58-40-20(G)

(a) Balancing of Interests Required by S.C. Code Ann. § 58-40-20(G)(1)

As discussed above, S.C. Code Ann. § 58-40-20(G)(1) requires elimination of cost shift "to the greatest extent practicable" while also "ensuring access to customer-generator options for customers who choose to enroll in customer-generator programs." The balancing of these two directives was the focus of much of the testimony provided in this docket, as has been the meaning of the General Assembly's express language indicating that such cost shift should only be reduced "to the greatest extent practicable." Given the balancing act expressly required by the General Assembly's plain language, the Commission will be satisfied that cost shift has been eliminated to the greatest extent practicable when solar customers are required to pay their fair share of costs in a way that does not undermine the economics of Solar Choice programs for rooftop solar customers.

1. Elimination of Cost Shift.

The topic of cost shift has been well-covered in this docket as well as the Generic Docket. Act 62 expressly requires the Solar Choice Tariffs to eliminate the cost shift "to the greatest extent practicable" in not one, but two places. S.C. Code Ann. § 58-40-20(A)(3); § 58-40-20(G)(1). On this point, the Commission finds certain analyses from the Generic Docket instructive. In that docket, the Commission examined cost of service implications arising from the Current NEM Programs. That examination revealed that NEM customers present a unique challenge in rate design because they often experience lower bills as a result of on-site consumption and export credits, but the utilities do not experience a corresponding decrease in the cost to serve those customers. For example, a utility must be able to serve an NEM customer's peak load given that the rooftop solar system may not be producing during the times when the customer's load is peaking—such as during a thunderstorm on a summer afternoon or during extreme cold weather on early winter mornings. Without a proper rate design, certain of the costs to serve NEM customers are necessarily recovered from non-NEM customers, resulting in a cost shift. Witness Horii suggested that under some circumstances, the solar proceeding should not force a change in rate schedules. Tr. 1119:24 – 1120:2. Witness Horii pointed to California where TOU rates still saw peaks from noon to six o'clock although the peak had transitioned to evening. Tr. 1119:12 – 1119:16. However, Witness Horii noted "that's just because that's what had been installed, you know, decades earlier, and people didn't want to rock the boat on it" as "[i]t's hard to make changes onto rates that you already have lots of customers participating on." Tr. 1119:16 – 1119:19. As discussed above, Witness Everett provided more granular explanations of the cost shift that typically occurs under NEM programs and illustrated the two primary ways in which it can arise—banking and rate design. *See* Everett Direct Testimony at 18.

Banking cost shift occurs when exports are valued at a rate higher than the benefit provided to the system via that generation. *See id.* at 18. Rate design cost shift is associated with behind-the-meter self-consumption and relates to the avoidance of certain fixed costs within volumetric rates. *See id.* at 18. DESC has addressed the banking cost shift through the utilization of a "net billing" arrangement and valuing excess energy that is exported to DESC at avoided cost rates, as outlined in Section VI(1)(b)(2) of this Order. Thus, this only leaves the rate design cost shift to be addressed. In describing this rate design cost shift, Witness Everett explained that the fixed costs within volumetric rates exist "regardless of level of sales in each period." *Id.* at 21:17. According to Witness Everett, these fixed costs represent long-term capital investments by DESC to ensure reliability and the appropriate level of customer service. *See id.* at 21. Witness Everett stated that although these costs are incurred to serve all of DESC's NEM customers, the vast majority of DESC's NEM customers are on simplistic volumetric rates and are therefore able to avoid their fair share of these fixed costs by simply reducing their consumption from DESC. *See id.* at 22. This means that these fixed costs are not recovered in the same way from these NEM customers given that their electric bills are typically lower. *See id.* at 23. This rate design cost shift results in an annual subsidy borne by non-participating residential customers in the amount of $459 and $1,106 for small general services customers. *See id.* at 23.

Witness Everett explained that the Solar Choice Tariffs address this cost shift head-on via the implementation of TOU rates, a minimum Subscription Fee, and a BFC. *See id.* at 24. Witness Everett noted that these rate structures not only reduce cost shift to the benefit of non-participating customers, but they create additional benefits as well, such as encouraging smart usage patterns that benefit the system as a whole and sending pricing signals that incentivize "right-sizing" customer generator systems. *See id.* at 51. Witness Everett pointed out that these rate structures also represent NEM best practices that have been utilized across the country to reduce cost shift. *See id.* at 52. As for the Solar Choice Tariffs, Witness Everett's analysis revealed that they eliminate a "significant portion" of the rate design cost shift. *See id.* at 47. Although the rate design cost shift was not completely eliminated, Witness Everett validly pointed out that the very language of Act 62 implies that a certain amount of remaining cost shift may be permissible. *See id.* at 49. Witness Everett noted that a complete elimination of cost shift would require these customer-generators to be placed into their own class, at the very least, which was not called for by Act 62. *See id.* at 49. Witness Kassis pointed to certain testimony in the Generic Docket to caution the Commission of the effects of any increased cost shift on low-income customers given that they are especially vulnerable to its effects. *See* Kassis Direct Testimony at 15.

However, other Parties in this docket desired for the Commission to accept that there is no cost shift under the Current NEM Programs, despite Act 62's clear guidance to this Commission to eliminate the same "to the greatest extent practicable." S.C. Code Ann. § 58-40-20(A)(3). For example, Witness Beach pointed to his testimony in the Generic Docket, wherein he claimed that "there is not presently a cost shift from solar customers to non-participating customers"—a stark contrast from DESC's testimony in this docket and the bulk of the testimony submitted in the Generic Docket. Beach Direct Testimony 64:7 – 64:8. Witness Barnes similarly casted doubt on the existence of the current cost shift, noting that he appreciates Act 62's direction to examine any "cost shifts that *might* exist." Barnes Direct Testimony 17:22 (emphasis in original). Witness Barnes claimed that he is unable to accurately examine the Solar Choice Tariffs because DESC did not produce a cost of service study. *See id.* at 23. Although Witness Barnes examined DESC's 2019 cost of service study and cannot point to any language within Act 62 requiring DESC to produce a new study here, Witness Barnes alleged that Act 62 contains "implied references" to requiring such a new study. *See id.* at 18.[11] Ultimately, Witness Barnes did echo DESC's claim that TOU rates can be utilized as a best-practice to align rates with the cost to serve to reduce the cost shift. *See id.* at 29. Witness Barnes also suggested eliminating the BFC in favor of a lower

[11] In response to Witness Barnes' suggestion that Act 62 required a cost of service study, Witness Everett noted that the requirement to provide a cost of service analysis was only applicable to the Generic Docket, and that although DESC did not conduct a new cost of service study for this docket, it relied upon the embedded cost of service study from its most recent rate case and the marginal cost study from its most recent avoided cost proceeding to develop the Solar Choice Tariffs. *See* Everett Rebuttal Testimony at 9. Witness Everett noted the inherent value in these studies, given that they were used to inform all of DESC's rate designs and were subject to the vetting and scrutiny of the Commission and stakeholders. *See id.*

minimum bill and eliminate the Subscription Fee and any other capacity-based charge entirely. *See id.* at 52.

On the other hand, Witness Beach provided an alternative "Joint Solar Choice Tariff" for the Commission's consideration, which he stated "does not cause an unreasonable cost shift to non-participating residential ratepayers." Beach Direct Testimony 24:9 – 24:10. The key components of the Joint Solar Choice Tariff include:

1. TOU Rates under DESC's Rate 5;
2. A minimum bill of $13.50 per month;
3. A change to the crediting mechanism under the Solar Choice Tariffs, while maintaining the annual netting under Current NEM Programs.

However, Witness Beach's analysis revealed that this Joint Solar Choice Tariff essentially maintains the status quo under the Current NEM Programs and would reduce the bill savings less than 10% for NEM customers compared to Current Programs, and in some cases, could even increase the benefit provided to NEM customers at the expense of non-solar customers. *See id.* at 17.

As for the ORS, although it also proposed an alternative to the Solar Choice Tariffs, it noted that the Solar Choice Tariffs utilized the "hallmarks of an ideal Solar Choice Metering Tariff." Horii Direct Testimony 5:16 – 5:17. The ORS proposal (the "ORS Tariff") seeks to go further than DESC to eliminate the cost shift. *See id.* at 17. Although the ORS and DESC disagreed on certain calculations of the cost shift, the ORS acknowledged that the proposed Solar Choice Tariffs reduce the cost shift occurring under the Current NEM Programs. *See id.* at 11. In fact, the ORS Tariff did not change any of the rate mechanisms in the Solar Choice Tariffs, but simply adjusted certain rate values—which include increasing the TOU rates—to further eliminate the cost shift under the Solar Choice Tariffs. *See id.* at 16. In sum, the ORS Tariff brings the cost shift "very close to zero and the largest installation sizes [have] slight negative cost shifts." *Id.* at 17:14 – 17:15. This complete elimination of cost shift is in-line with the ORS's mission, as laid out by Witness Lawyer, to "protect all classes of DESC customers from unreasonable shifts in cost in the determination of DESC's successor Solar Choice Metering Tariffs." Lawyer Direct Testimony 3:10 – 3:11. Witness Lawyer explained that some parties may have intervened to support certain commercial interests, which is "not always aligned with the interests of the using and consuming public." *Id.* at 3:20 – 3:21.

On rebuttal, Witness Kassis noted that agreement between DESC and the ORS that self-interests may drive proposed modifications to the Solar Choice Tariffs in this docket. *See* Kassis Rebuttal Testimony at 2. For example, Witness Zimmerman's stated intent in the Generic Docket was to promote "investment confidence" in rooftop solar, rather than balancing the interests of Act 62. *Id.* at 15:17. However, in this docket, Witness Kassis noted that the words "cost shift" did not appear anywhere in Witness Zimmerman's direct testimony. *Id.* at 18:19. Witness Kassis went on to explain that although the ORS went further than DESC to eliminate cost shift, DESC still used what the ORS characterized as "hallmarks of an ideal tariff" to balance the various requirements within Act 62. *Id* at 3:10. Witness Everett further noted that the tools employed by DESC in the Solar Choice Tariffs reflect best-practices that have been utilized across the country to align rates with the cost to serve—these best-practices include things like TOU rates, a minimum bill, demand-related charges, and a basic facilities charge. *See* Everett Direct Testimony at 52. For example, Witness Kassis noted that one such best practice within the Solar Choice Tariffs is the Subscription Fee that recovers costs associated with the customer-generators usage of T&D assets, which is a cost for which those customers are responsible. *See* Kassis Rebuttal Testimony at 7. Witness Kassis noted that customer-generators' responsibility for such costs were well-established in the Generic Docket given that DESC still must be able to serve those customer's peak loads—which necessitates investments in transmission and distribution assets to serve such customers. *See id.* at 10. Witness Kassis explained that the fact the charge is tied to system size is further evidence that the charge is based upon cost-causation principles given that an increase in the rooftop system's size "corresponds to an increased demand placed upon the grid via energy delivered to the customer and exported to DESC." *Id.* at 11:6. Witness Everett similarly explained that the BFC is also tied to cost-causation principles because it recovers costs to serve these customers that exist regardless of the amount of self-generated power these customers consume. *See* Everett Rebuttal Testimony at 19. Witness Everett detailed that the BFC and the Subscription Fee were developed through DESC's most recent cost-of-service study, and represent a best-practice of designing cost-reflective rates that, when taken together, serve to significantly reduce the rate design cost shift. *See id.* at 5. Witness Everett also dismissed Witness Barnes' suggestion to replace the Subscription Fee with a minimum bill by highlighting the differences that could occur in the overall bill, even if the minimum bill was set to the same level as the Subscription Fee. *See id.* at 20. Witness Everett cautioned that this further illustrates DESC's point that the Commission cannot simply treat these rate-making tools as a "buffet." *Id.* at 21:2. Contrary to Witness Beach's suggestion, these TOU rates reflect the latest information on grid costs, and reflect a substantial improvement over Witness Beach's suggestion to utilize the TOU rates in Rate 5. *See id.* at 27. DESC Witness Everett pointed out that the Rate 5 rate structure "has been essentially unchanged since 1987." *Id.* at 27:9. Witness Everett further cautioned against simply picking and choosing certain of the ratemaking elements within the Solar Choice Tariffs in the way that these witnesses suggest given that they are designed to work in conjunction with the other tools to effect the requirements of Act 62. *See id.* at 27.

The surrebuttal testimony of Witness Beach, Witness Barnes, and Witness Moore focused heavily on the testimony of the ORS, citing alleged flaws in the ORS's analysis given its singular focus on eliminating the cost shift to further the interests of the "using and consuming public" and not focusing on other requirements within Act 62, such as avoiding disruption to the market. *See* Moore Surrebuttal Testimony at 6. Likewise, Witness Beach and Witness Barnes alleged that DESC and the ORS simply incorrectly estimated the costs and benefits of the generation provided by these customer-generators, which led to overly aggressive rate structures. *See id.* at 20. Witness Beach noted that Witness Everett did not accurately account for benefits such as decarbonization and resiliency, while Witness Barnes opines that both DESC and the ORS ignored certain long-term values associated with rooftop solar. *See* Beach Surrebuttal Testimony at 19. Witness Moore suggested that DESC's motive in eliminating the cost shift is not driven by Act 62, but by "shareholder profit." Moore Surrebuttal Testimony 8:14. However, in response to a questions from Commissioner Caston, Witness Moore conceded that there are other factors driving the desire to eliminate the cost shift in accordance with Act 62, "recognizing that there's a lot of sentiment to move forward with something different." Tr. 865:25 – 866:1. Likewise, Witness Barnes opined that the purpose of the Subscription Fee is not actually to recover costs attributable to these customers as DESC suggested, but to simply charge these customers for the energy they generate and consume. *See* Barnes Surrebuttal Testimony at 20. Witness Barnes further alleged that the subscription fee is unnecessary because there is actually no cost shift under Current NEM

Programs. *See id.* at 20. Witness Beach noted that Witness Horii's proposal to lower the Subscription Fee, while raising TOU rates, would "reduce substantially the available savings from solar systems of all sizes." Beach Surrebuttal Testimony 6:1 – 6:2.

At hearing, Witness Rooks noted that although DESC is introducing new charges, there would be no "new revenue" inuring to DESC as a result of the new rate structures within the Solar Choice Tariffs given that the tariffs simply align existing costs with benefits and do not change DESC's actual revenue requirement. Tr. 566.12 – 566.13. Rather, the Solar Choice Tariffs represent "kind of a shift between the revenues" to answer the call of Act 62 to align rates with the cost to serve. Tr. 567.11 – 567.12. This "revenue-neutral" rate structure "ensures the average NEM customer pays the same amount annually that they would have under their current rate, prior to installing rooftop solar." Tr. 229:22 – 229:25. Witness Kassis further detailed the motivation behind the development of the Solar Choice Tariffs and explained that the reduction of the cost shift "had nothing to do . . . with the [DESC] shareholder . . . [and] had everything to do with what was in that legislation and what [DESC] was required to do." Tr. 157.15 – 157.18.

A review of the record indicates that DESC utilized recent data and Commission-approved methodologies when developing its Solar Choice Tariffs.[12] The Commission appreciates that the realities of serving NEM customers can present challenges. However, as described in this proceeding and at length in the Generic Docket, simply reducing an NEM customer's electric bill does not similarly reduce a utility's cost to serve that customer and the margin is not adequately recaptured via exclusively volumetric rates. This leaves a gap that must be recovered from other customers via "rate design" cost shift. This is a primary driver of the very "cost shift" which Act

[12] Contrary to Witness Barnes' assertion, the Commission has not found convincing evidence within this record of Act 62 that would require DESC to conduct a new, NEM-specific cost-of-service study.

62 seeks to eliminate. The other primary driver is the "banking" cost shift that DESC has addressed through the "net billing" regime that credits exports at avoided costs. It is clear that the Solar Choice Tariffs reduce the cost shift, heeding the call of Act 62. Witness Everett's analysis rests upon evidence-based, Commission-approved methodologies that indicate the banking cost shift is completely eliminated, and the rate design cost shift is significantly reduced through the use of innovative new charges that are tied to the costs incurred by DESC to serve and maintain the two-way flow of power in which these customers are engaged. Additionally, the Commission finds it reasonable to tie the Subscription Fee to the size of the system. On this point, it is important to note that, contrary to the assertion of several intervenors, size of the system does not correlate to consumption. For example, a system can be sized at 18 kW, but the customer's load could peak at 8 kW, which means that the customer would never consume over 8 kW. Clearly, in that scenario (and a number of others) the customer's ability to self-consume is far less than the system size. However, in that example, the 18-kW system does represent a system that when the customer is consuming at peak, could still export 10 kW to the grid. As system size goes up, so does the ability to export to the grid. The Subscription Fee incentivizes customers to "right-size" their systems by installing systems with capacity closer to their demand profile, rather than simply over-building to guarantee a stream of export credits from the utility. Likewise, if the rooftop solar system does not produce that full 8 kW during peak time, then DESC would have to supply the remainder, if not all, of the customer's peak load requirements. Clearly, both scenarios require DESC to invest in T&D assets to adequately serve the customer, and tying the Subscription Fee to size of the system simply reflects the reality that larger systems can export more to the grid, resulting in increased investment in T&D assets. As for the BFC, it recovers certain fixed costs that exist regardless of

variables such as system size or self-consumption. The Commission finds that these rate-making tools draw upon demonstrated best practices, and the Commission is unwilling to construe these charges as anything other than what they are—comprehensive rate-making tools that heed the call of Act 62 to align costs with benefits, resulting in a significant reduction in the cost shift.

2. Ensuring Access to Customer-Generator Options.

The call within S.C. Code Ann. § 58-40-20(G)(1) to eliminate cost shift "to the greatest extent practicable" while still "ensuring access to customer-generator options" mirrors the General Assembly's intent within Act 62 to avoid disruption to the industry while continuing the successful deployment of distributed energy resources. The Commission interprets this language to mean more than simply permitting enrollment in NEM programs. Rather, it necessarily encompasses the economics of those programs for customers and whether such programs represent a feasible option for customers who choose to enroll when accounting for the investment in rooftop solar.

Witness Robinson evaluated the customer economics of the Solar Choice Tariffs via three primary measures: simple payback period, return on investment ("RoI"), and the customer bill ratio. *See* Robinson Direct Testimony at 4. Witness Robinson described the simple payback measure as the undiscounted annual cash flows for cash purchased systems, including the upfront equipment and installation costs, annual incentive payments, operation and maintenance costs, and customer bill savings. *See id.* at 8. The payback time is the number of years it takes for the total debits (positive cashflow) to equal the total credits (cash outflow). *See id.* Witness Robinson explained that the RoI measure calculates the discount rate at which the Net Present Value ("NPV") of all the measured undiscounted cash flows (which include certain financial assumptions) is equal to zero. *See id.* Like the payback period, this is calculated for cash-purchased systems. *See id.*

As for the third measure, Witness Robinson stated that the customer bill ratio equals the all-in customer annual bill after installing solar PV (electric bill, system loan costs, O&M, incentives), divided by the annual electric bill the customer would have had without installing solar PV. *See id.* at 8. This is calculated for a system purchased with a zero-down loan arrangement using the levelized cash-flows associated with the benefits and costs of solar PV, for an assumed 20-year lifetime of the equipment. *See id.* Bill ratios over 1.0 can be interpreted as the customer paying a premium, while bill ratios under 1.0 can be interpreted as the customer saving money with the new system. *See id.* Witness Robinson explained that no single measure can be used to forecast customer behavior, but that each metric must be used to provide a comprehensive picture of customer economics. *See id.* at 10. For example, although the payback period measurement and RoI may be more intuitive, they do not apply when there is no initial cash outlay (e.g., leases or power purchase agreements). *See id.* For scenarios such as zero-down loan arrangements or solar leases, Witness Robinson opined that the customer bill ratio is more appropriate since it expresses a customer's relative gain or loss. *See id.*

Witness Robinson measured each of these metrics across three different scenarios—Low Cost, Mid Cost, and High Cost. *See id.* at 9. The "Low Cost" scenario uses a lower Solar PV cost trajectory and assumes that the Investment Tax Credit ("ITC") will be extended. *See id.* The "Mid Cost" scenario uses the mid-range cost trajectory for solar installations, and assumes the ITC will sunset. *See id.* The "High Cost" scenario uses a higher cost trajectory for solar installations and also assumes the ITC will sunset. *See id.* Witness Robinson also modeled three system size scenarios for each sector, and two solar PV lifetime scenarios: 20 years and 25 years. *See id.* For all of these scenarios and system sizes, Witness Robinson modeled prices based on individual system components, direct labor, permitting, overhead, margin, sales and marketing, and balance of system costs. *See id.*

Witness Robinson's key findings are as follows:

- Customer bill ratios under the Solar Choice Tariffs for a 3-kW residential system are 0.81 for the "Low Cost" and about 0.87 for both the "Mid Cost" and "High Cost" scenarios in 2021. *See id.* at 12. Customer bill ratios under the Solar Choice Tariffs for a 12.5 kW small commercial system are 0.85 for the "Low Cost," about 0.90 for the "Mid Cost" and 0.92 for the "High Cost" scenarios in 2021. *See id.* at 13.
- Simple payback periods under the Solar Choice Tariffs for a cash purchased 3 kW residential system in 2021 are 6.9 years in the "Low Cost" scenario, 8.9 years for the "Mid Cost" scenario, and 9.7 years for the "High Cost" scenario. *See id.* at 13. The corresponding RoI is 16.9% in the "Low Cost" scenario, 11.8% in the "Mid Cost" scenario, and 10.3% in the "High Cost" scenario. *See id.* at 13.
- Simple payback periods under the Solar Choice Tariffs for a cash purchased 12.5 kW small commercial system in 2021 are 5.8 years in the "Low Cost" scenario, 7.5 years for the "Mid Cost" scenario, and 8.1 years for the "High Cost" scenario. *See id.* at 14. The corresponding RoI is 20.1% in the "Low Cost" scenario, 14.7% in the "Mid Cost" scenario, and 13.0% in the "High Cost" scenario. *See id.* at 14.

Witness Robinson presented these metrics in the context of the solar adoption forecast (the "Solar Forecast") conducted by Guidehouse that was first presented to the Commission in the Generic Docket. *See id.* at 3. Witness Robinson attached that same forecast to his direct testimony in this proceeding, and the Solar Forecast utilizes proprietary modeling to predict the adoption rate of rooftop solar over the next ten years in DESC's territory. *See id.* at 18. In short, the Solar Forecast predicted that solar adoption in DESC's territory will continue to grow, although certain sectors, such as non-residential, have exhibited slowing growth in recent years. *See id.* Witness

Robinson attributed this slowed growth to factors outside of DESC's control, such as the availability of incentives. *See id.*

Witness Beach argued that the only "economic" residential system sizes under the Solar Choice Tariffs would be small systems installed by large residential customers, and alleged that a 7-kW AC system would have a payback period of over 20 years. *See* Beach Direct Testimony at 10.

Witness Barnes agreed with Witness Robinson that certain installation rates have slowed in recent years, but disputes the underlying reason for such slow-down. *See* Barnes Direct Testimony at 58. Rather than a changing incentive landscape, Witness Barnes argued that recent decreases in certain of DESC's rates have contributed "more significantly" to the slowing adoption of solar. *See id.* Witness Barnes also took issue with certain system cost assumptions utilized by Witness Robinson, and noted that the low-cost scenario should be "entirely disregarded" because it assumes an increase in the ITC. *See id.* at 70. Witness Barnes continued to critique Witness Robinson's analysis by highlighting the fact that Witness Robinson's analysis assumes a system size of 3 kW, which is significantly smaller than the average system size used by Witness Everett in her own analyses. *See id.* at 73.

Witness Zimmerman testified on behalf of Alder Energy that commercial and industrial ("C&I") customers do not account for all three of Witness Robinson's metrics when assessing an investment, but solely focused on payback period. *See* Zimmerman Direct Testimony at 6. Witness Zimmerman stated that C&I customers would not accept anything longer than an 8-year payback period—which Witness Zimmerman argues can only be achieved via 1:1 NEM—although Witness

Zimmerman did not conduct any analysis on this point or otherwise provide the Commission with evidence supporting his claim. *See id.* at 8.

In response to Witness Beach, Witness Robinson pointed out that Witness Beach did not define for this Commission what his definition of "economic" was, but that Witness Robinson's analysis showed that across all system sizes and scenarios, the customer bill ratios are less than 1.0—representing a relative gain to customers under each scenario. *See* Robinson Rebuttal Testimony at 13. In his rebuttal testimony, Witness Robinson updated the customer economic forecast to include the newly passed extension of the Federal ITC, which further improved the projected payback, return on investment, and bill ratios for solar customers *See id.* at 2. Witness Robinson also explained that the Solar Choice Tariffs do encourage customers to "right-size" their systems by installing systems with capacity closer to their demand profile, rather than simply over-building to guarantee a stream of export credits from the utility. *See id.* at 14. Witness Robinson also pointed to several flaws in Witness Barnes' analysis related to the slowing adoption of solar, and noted that Witness Barnes' accusations are pure mischaracterizations of the data. *See id.* at 3. Witness Robinson produced detailed, granular evidence showing that solar installation in DESC's territory began to slow during a time of stable rates in South Carolina, and well before the decrease in rates cited by Witness Barnes. *See id.* Witness Robinson also produced evidence showing that the increased adoption of solar that occurred in 2015 was not driven by decreased rates—rather, contrary to Witness Barnes' assertion, solar adoption is more significantly influenced by externalities outside of DESC's control. *See id.* at 5. As such, Witness Robinson argued that the Solar Choice Tariffs should be aimed at fulfilling Act 62, rather than propping up the solar industry with favorable rates given the more significant variables in play. *See id.* Additionally, Witness

Robinson noted that the fundamental data source upon which Witness Barnes rests his system cost analysis is fatally flawed, so much so that Guidehouse does not use that data source in any of its pricing models. *See id.* at 8. By comparison, Witness Robinson explained that the data utilized in his analysis resulted from a synthesis of regularly compiled sources for benchmarking, including market reports and web scraping. *See id.* at 10. As for Witness Barnes' suggestion that the Low Cost scenario should be disregarded, Witness Robinson pointed out that this scenario can provide valuable perspective by providing yet another possible adoption forecast for the Commission's consideration. *See id.* at 12. Although Witness Barnes argued that it should be disregarded because of its assumption that the ITC would increase, Witness Robinson noted that the ITC assumption in the Low Cost scenario is only 4% greater than what was actually passed by the Senate. *See id.* According to Witness Robinson, such a small difference is no reason to completely disregard any scenario. *See id.* Additionally, Witness Robinson explained that his utilization of a 3-kW system size under certain scenarios is intentional and does not present a flaw in his analysis or Witness Everett's. *See id.* at 13. Instead, it represents best practices. *See id.* For example, Witness Everett utilized historical data, which is common in rate design. *See id.* Witness Robinson explained that his analysis, on the other hand, utilized average consumption profiles, which is more appropriate for long-run forecasting. *See id.* Finally, Witness Robinson explained that Witness Zimmerman's characterization of payback period versus RoI simply confuses related topics and is not supported by any evidence or analysis in the record. *See id.* at 16. Likewise, Witness Robinson noted that Alder Energy's evidence-lacking testimony is in conflict with the actual data and analysis in the record, given that Witness Robinson's analysis has shown that C&I customers can experience a payback of less than 8 years without retaining 1:1 NEM. *See id.* at 17.

Witness Beach responded by noting that smaller systems would indeed benefit from the Solar Choice Tariffs, but at a greater rate than other larger systems, which would incentivize down-sizing of solar installations. *See* Beach Surrebuttal Testimony at 26. Witness Barnes stood by his statement that installations are more significantly affected by rates and suggested that Witness Robinson simply misread the very data he produced. *See* Barnes Surrebuttal Testimony at 31. Witness Barnes acknowledged certain of the flaws in his data source that were mentioned by Witness Robinson, noting that the data may not be current once released and that it "has some limitations in scope." *Id.* at 33:1. As for the ITC assumption in the Low Cost scenario, Witness Barnes acknowledged that Witness Robinson's forecasted assumption was only 4% off, but notes he simply cannot reference the version of the ITC package referenced by Witness Robinson because there was no citation provided. *See id.* at 36. Lastly, Alder Energy re-iterated its claims related to customer economics, noting that it speaks from "experience, not a textbook." *See* Zimmerman Surrebuttal Testimony at 2.

During the hearing, in response to questions regarding how the rates in the Solar Choice Tariffs would affect solar developers and the industry at large in South Carolina, Witness Robinson mentioned a study done by Guidehouse in Arizona. Tr. 454.13 – 454.15. The study mentioned by Witness Robinson was a margin compression analysis (the "Margin Compression Analysis")[13] that examined the rooftop solar leasing practices in Arizona and California. Tr 454.13 – 454.15. The Margin Compression Analysis discovered that, despite declines in solar system costs and favorable policy decisions during the study periods, lease rates nevertheless increased, resulting in higher project returns for developers. Tr. 454.23 – 455.8. A further review of several jurisdictions

[13] The Margin Compression Analysis was submitted as Late Filed Exhibit No. 5 at the request of Commissioner Williams.

indicated that leasing providers appeared "to be tracking utility rates and pricing accordingly." Robinson Late-Filed Hearing Exhibit No. 5 at 20. In fact, DESC Witness Robinson explained that in many jurisdictions, "there is a large difference between the cost of solar PV and the price of solar PV, [so] there's a lot of margin, a lot of profit for installers right now." Tr. 452.6 – 452.9. Witness Robinson explained that in some cases, "that margin has been . . . as high as 60 percent in some territories." Tr. 454.6 – 454.8. Taken together, along with the other findings in the Margin Compression Analysis, the study concluded that solar leasing providers have an ability to adapt their profit margins in the face of changing rate structures to maintain project returns. Witness Robinson pointed to this study as evidence that the intervenor's concerns regarding the solar industry are simply exaggerated. Tr. 461:10 – 461:19. DESC Witness Robinson did not conduct a similar analysis for South Carolina, but he noted that even though his analysis revealed that the Solar Choice Tariffs have a slightly longer payback period under current prices, we may expect developers to simply "offer a slightly lower price and, therefore, take a slightly lower profit" in order to offer the same payback period. Tr. 452.17 – 452.18. This claim is evidenced by states "like Nevada, states like Arizona, states like Hawaii, that have done NEM reform . . . [and] have seen that margin compression and the payback periods to be more or less stable." Tr. 452.23 – 452.25. Essentially, Witness Robinson stated that although Act 62 called for customer-generators to bear their fair share of costs, solar developers in South Carolina could adapt to the rate structures within the Solar Choice Tariffs and mitigate the impacts, if any, that they would have on customer adoption. Tr. 452.16 – 452.18. Indeed, Witness Robinson explained that the "most likely trajectory" is that the longer payback period under the Solar Choice Tariffs "does not make a big difference and that installation rates continue at the stable levels we've seen from 2019 and 2020." Tr. 457.11 – 457.12.

Upon review of the record, the Commission finds that the Solar Choice Tariffs do their part in providing access to customer-generator options in accordance with Act 62. The sheer amount of discussion over appropriate pricing, ITC forecasts, and customer behavior convinces the Commission that the Solar Choice Tariffs can only do so much to ensure that rooftop solar in South Carolina is a viable option in DESC's service territory—particularly while also balancing the various other interests within Act 62. Although the Commission appreciates the testimony regarding first-hand experience and the desire of certain Parties to have the Commission prioritize one favorable metric over other less favorable metrics, Witness Robinson provided a sound, comprehensive analysis of multiple scenarios of solar adoption in South Carolina utilizing proprietary data and modeling software which must necessarily be given its due weight. Additionally, during the hearing, Witness Robinson provided considered, deliberate explanations of these customer economics to the Commission, and presented evidence indicating that solar developers have the ability to adjust to new rate structures in a way that maintains project returns. In this aspect, the Commission notes that Act 62 calls upon increased flexibility by all interested parties and solar developers are no different. Likewise, although Witness Beach has repeatedly decried the Solar Choice Tariffs for incentivizing smaller systems, the Commission sees this incentive structure as a net benefit for DESC's system. As explained by Witness Everett, incentivizing customers to install systems that more closely track customer demand, rather than simply attempting to game the export mechanism, provides benefits to all of DESC's customers. A review of Witness Robinson's analysis reveals that the Solar Choice Tariffs hit the mark in this aspect. Although the Commission understands why certain Parties would be motivated to implement rate structures that encourage bigger systems—which result in more revenue to installers—such a rate structure would violate the principles of Act 62. In short, the three metrics provided by Witness Robinson indicate that the Solar Choice Tariffs provide access to customer-generator options by providing a reasonable economic incentive for rooftop solar customers going forward, despite a pre-existing trend of declining adoption rates.

3. To the Greatest Extent Practicable.

Given that the analyses presented by DESC are clear that cost shift is reduced and that customer-generators will have access to economically favorable NEM options, the last question for the Commission to consider on this topic is whether these interests are balanced in a way that indicates the cost shift was eliminated "to the greatest extent practicable." S.C. Code Ann. § 58-40-20(A)(3). Although Act 62 did not provide guidance as to what level of cost shift fulfills the "greatest extent practicable" language within Act 62, it is reasonable to assume that fulling the various requirements naturally achieves an appropriate balance point. Certainly, maintaining the status quo under Act 236—which the Joint Solar Choice Tariffs seem to do—would not be an acceptable result given that the very cost shift cited by Act 62 occurs under the Current NEM Program, as discussed at length in the Generic Docket. However, Act 62 stops short of requiring a complete elimination of cost shift—such as within the ORS Tariff—and implies that a certain level of remaining cost shift is acceptable. On this point, it is important to note that—contrary to Witness Moore's allegation—the cost shift with which Act 62 is concerned is an issue of allocating expenses between customers, not between DESC's shareholders and NEM customers.[14] In either

[14] Commissioner Thomas questioned Witness Lawyer about the need for a regulatory liability account to hold any new revenue until intended customers benefit from those new revenues. Tr. 1017:15 – 1017:17. However, as discussed

event, DESC recovers its cost to serve customers. The proposals before us simply disagree as to which customers DESC recovers those costs.

At one end of the spectrum, the intervenors suggest that the "greatest extent practicable" means something very similar to the status quo, leaving non-solar customers to pay a hefty cost to subsidize NEM customers. This position is based largely on assumed benefits provided by rooftop solar, benefits well beyond those recognized for utility scale solar or other renewable generation, and is not based on any Commission determination or otherwise verifiable data. The Solar Choice Tariffs proposed by DESC strike a middle ground. As discussed below, striking this middle ground not only benefits DESC's non-solar customer base (representing approximately 760,000 customers) by substantially reducing the cost shift but also paves a way to achieve the other requirements within Act 62, such as ensuring access to customer-generator options and permitting customer-generators to consumer customer generated power behind the meter without penalty as discussed more fully below. These same requirements would not as easily be achieved by the ORS's singular focus on eliminating cost shift or the intervenors problematic approach of essentially ignoring the cost shift issues altogether. In the end, non-NEM customers will bear less of the cost shift burden under the Solar Choice Tariffs, while developers may have to tweak their margins to maintain a stable payback period for NEM customers—a compromise in the spirit of Act 62. Therefore, the Commission is satisfied that the Solar Choice Tariffs fulfill Act 62's requirement by eliminating cost shift to the "greatest extent practicable."

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by Witness Everett, there is no "new revenue" inuring to DESC as a result of the Solar Choice Tariffs. Rather, the elimination of cost shift simply ensures that the rates paid by Solar Choice customers more accurately reflect the costs and benefits of serving those customers, rather than leaving non-NEM customers to bear the majority of those costs. As such, there is no need to institute a regulatory liability account.

(b) S.C. Code Ann. § 58-40-20(G)(2).

Specifically, Act 62 requires that the Solar Choice Tariffs "permit solar choice customer-generators to use customer-generated energy behind the meter without penalty." S.C. Code Ann. § 58-40-20(G)(2).

DESC Witness Everett stated that the Solar Choice Tariffs have fulfilled this requirement because, as discussed above, the fixed charges within the tariffs simply recover fixed costs attributable to serving those customers, and do not vary based upon how much self-generated power these customers actually consume. *See* Everett Direct Testimony at 53. Witness Kassis echoed Witness Everett's testimony, and noted that customers-generators are "not charged a premium based upon the amount of self-supplied energy they consume." Kassis Direct Testimony 13:12. In this aspect, Witness Kassis noted that the Solar Choice Tariffs are identical to the Current NEM Programs because customers can offset their energy usage from DESC on a 1:1 basis by consuming self-generated power on-site. *See id.* at 13.

Witness Barnes alleged that not only does the Subscription Fee within the Solar Choice Tariffs represent a penalty, but so does the Basic Facilities Charge. *See* Barnes Direct Testimony at 51. Witness Barnes stated that the mere existence of a BFC that differs from the methods used to set the BFC for other, non-solar customers amounts to discrimination in violation of Act 62. *See id.* Witness Zimmerman went even further to suggest that "anything less than full retail credit for consumption of customer-generation, whether hidden in a subscription fee or not, is discriminatory." Zimmerman Direct Testimony 14:2 – 14:4. However, Witness Horii did not characterize these rate-making tools as a penalty, and the ORS Tariff utilized the same rate-making tools. *See* Horii Direct Testimony at 5.

Witness Kassis noted the agreement between the ORS and DESC on this point, and notes that the subscription fee "simply recovers T&D costs related to the customer-generator's usage of the grid (two-way flow)—not the customer's consumption of behind-the-meter generation." Kassis Rebuttal Testimony 7:17 – 7:19 (emphasis in original).

In his surrebuttal testimony, NCSEA Barnes re-iterated that simply the existence of charges in amounts different from similar charges to non-solar customers represents a penalty in violation of Act 62, and DESC has not provided a cost-of-service study to support these claims. *See* Barnes Surrebuttal Testimony at 23. Witness Zimmerman simply asserted that the Subscription Fee is "penal." Zimmerman Surrebuttal Testimony 4:24.

Upon review of the record, the Commission finds that there are no charges within the Solar Choice Tariffs tied to the amount of energy consumed behind-the-meter. Although several intervenors argue that the Commission should find that the mere imposition of different charges (as compared to non-solar customers) on these customers is de facto violation of Act 62, they omit the key distinction—NEM customers do not contribute on par with non-solar customers to DESC's cost to serve. For that reason, the Commission rejects the argument that the mere existence of these charges results in a penalty. Clearly, these charges are not tied to power consumed behind-the-meter and instead are built upon cost-causation principles. Additionally, the Commission notes that the ORS had no issues with these rate-making tools. As such, the Commission finds that the charges proposed by DESC do not represent a penalty on behind-the-meter consumption in violation of Act 62.

3. S.C. Code Ann. § 58-40-20(H)

S.C. Code Ann. § 58-40-20(H) requires the Commission to establish a "minimum guaranteed number of years to which solar choice metering customers are entitled pursuant to the commission approved energy measurement interval and other terms of their agreement with the electrical utility." The Solar Choice Tariffs stipulate that customers must take service under the same for a minimum one-year term and, in accordance with Act 62, the methodology via which export credits are valued will be updated every five years, with the actual values within the methodology updated annually.[15] *See* Exhibit No. (AWR-1) and Exhibit No. (AWR-2) to Rooks Direct Testimony (Hearing Exhibit 6); Rooks Direct Testimony at 10. Neither the intervenors nor the ORS submitted conflicting testimony on this point.

VII. CONCLUSIONS OF LAW[16]

Having concluded its review of the proposed Solar Choice Tariffs which is evidenced in a record of testimony of the witnesses and representations of counsel and after careful consideration of the issues and review of all evidence in the record, the Commission hereby makes the following determinations regarding establishment of DESC's Solar Choice Program:

1. The Current NEM Programs contain a subsidy in the form of a cost shift borne by non-participating customers. This cost shift is in furtherance of the principles within Act 236, which aimed to accelerate the growth of rooftop solar in South Carolina. However, the Commission cannot simply maintain the status quo of the Current NEM Programs given that the

[15] Although Act 62 did not provide similar specific instructions for values of the other rate mechanisms (such as the BFC and Subscription Fee), the Commission notes that those values are subject to update and adjustment in DESC's base rate cases, just like other DESC retail rates.
[16] To the extent the following conclusions of law are findings of fact, they are so adopted.

General Assembly, through Act 62 mandated new requirements, such as the required elimination of cost shift "to the greatest extent practicable."

2. These requirements are found in provisions specific to Solar Choice, as well as the General Assembly's broader expression of intent. That intent necessarily guides the Commission's consideration of the Solar Choice Tariffs and is found in S.C. Code Ann. § 58-40-20(A). The Commission fulfills this intent by ensuring that the tariffs approved by the Commission in this docket comply with the specific Solar Choice requirements set out by the General Assembly within Act 62 given that those specific requirements[17] provided by the General Assembly in S.C. Code Ann. § 58-40-20(F)-(H) necessarily embody the broader intent express by the plain language of S.C. Code Ann. § 58-40-20(A).

3. DESC presented analysis evidencing the Solar Choice Tariffs' achievement of these requirements and alignment of costs and benefits via the use of innovative rate structures that draw upon best practices from across the country. This alignment of costs and benefits arises in two primary ways: (i) through the utilization of TOU Rates—as expressly contemplated by Act 62—and fixed charges to ensure that the rates paid by customers actually reflect DESC's cost to serve those customers, while accounting for temporal and seasonal variations; and (ii) an avoided cost credit paid for exports via a net billing arrangement, which fairly compensates customer-generators for the benefits provided by that power, as measured by the costs DESC can avoid as a result.

[17] The Commission finds that the term "successor" in S.C. Code Ann. § 58-40-20(F)(2) and (G) was intended to apply to the Commission's consideration of the Solar Choice Tariffs in this docket.

4. By aligning costs with benefits in this way, the Solar Choice Tariffs achieve a primary requirement of Act 62 of significantly reducing cost shift by addressing the primary drivers of cost shift under the Current NEM Programs—rate design and banking cost shift.

5. The TOU Rates and fixed charges significantly reduce the rate design cost shift by capturing the cost to serve NEM customers in a way that volumetric rates alone simply cannot.

6. Likewise, moving to a net billing arrangement with exports valued at avoided costs significantly reduces the banking cost shift by ensuring that customers cannot simply accumulate over-valued export credits over a lengthy netting period in order to game the export credit mechanism. Including speculative, unquantifiable benefits—such as alleged public health benefits—in the value paid for these exports would simply maintain the status quo by inflating these rates in a way that is not actually tied to DESC's cost to serve and would ignore best practices currently employed.

7. Although the Solar Choice Tariffs represent a significant improvement over the Current NEM Programs in aligning costs with benefits and reducing the cost shift, they do not do so at the expense of NEM customers or the solar industry as a whole.[18] As discussed above, the Solar Choice Tariffs significantly reduce the cost shift "while also ensuring access to customer-generator options for customers who choose to enroll in customer-generator programs." The Commission interprets this language to mean that the Solar Choice Tariffs must eliminate cost shift while still providing an economically viable NEM option for customers with rooftop solar panels. Achieving this balance fulfills Act 62's mandate to eliminate cost shift "to the greatest

[18] It is clear that DESC accounted for a broad range of interests given that the ORS Tariff—which solely focused on eliminating the cost shift to the exclusion of providing "access" or avoiding "disruption"—included rates higher than those within the Solar Choice Tariffs, representing an "extreme" position. Tr. 1101:4 – 1103:15.

extent practicable." The Commission is satisfied that the Solar Choice Tariffs fulfill this mandate. DESC presented detailed, comprehensive analyses evidencing, under a variety of tests and scenarios, that rooftop solar under the Solar Choice Tariffs is an economically viable investment for customers. However, the Commission recognizes that the Solar Choice Tariffs are just one factor in a market landscape that can significantly impact the viability of rooftop solar for customers. Even still, the Solar Choice Tariffs have done their part, and the Commission is confident that solar developers will adapt and adjust to Act 62 and the resulting new rate structures, as others have seen them do across the country.

8. As for NEM customers, Act 62 requires that customers must not be penalized for their consumption of behind-the-meter generation. The DESC Solar Choice Tariffs abide by this restriction. The innovative rate structure within the Solar Choice Tariffs ensures that customer-generators pay their "fair share" in accordance with Act 62, and none of those rate structures is tied to consumption of behind-the-meter generation. Rather, it ties to use of the DESC system to both import power and export power, which is un-related to the consumption of self-generation behind the meter, and simply recoups the costs incurred by DESC to serve and receive power from rooftop systems.[19] This rate structure has the added benefit of incentivizing customers to "right-size" their systems, which represents a benefit to all of DESC's customers.

[19] As DESC Witness Everett explained, the Subscription Fee mirrors the demands on the DESC system while also encouraging customers to install systems that more closely mirror their actual demand—an incentive structure that encourages efficient use of the electricity system to the benefit of all customers.

VIII. ORDERING PROVISIONS

IT IS THEREFORE ORDERED THAT:

1. Fulfilling Act 62's requirements necessitate a move away from the status quo under Current NEM Programs.

2. By fulfilling the specific requirements within Act 62 related to the Solar Choice Program, the Commission also fulfills the General Assembly's broader intent.

3. Act 62 requires the balancing of multiple requirements where each must work with the other and fulfilling these requirements requires a rate structure that accurately captures the costs and benefits to the DESC system under the Solar Choice Program.

4. The time-variant rates and fixed charges, along with the t net-billing arrangement, represent industry best-practices that will be utilized in South Carolina to ensure NEM rates accurately reflect DESC's cost to serve NEM customers.

5. Paying avoided cost rates for export credits utilizes a best-practice to provide an accurate and fair value to customers given that the impact of solar generation to the DESC system is materially the same whether it is produced by utility-scale generators or rooftop solar.

6. By aligning costs with benefits in this way, the Solar Choice Tariffs achieve a primary requirement of Act 62 of significantly reducing cost shift by addressing the primary drivers of cost shift under the Current NEM Programs—rate design and banking cost shift.

7. Although cost shift is significantly reduced, the Solar Choice Tariffs represent an economically viable option for rooftop solar customers, and thus, achieve the elimination of cost shift "to the greatest extent practicable."

8. The Solar Choice Tariffs do not penalize customer-generators for behind-the-meter consumption because there is no charge that ties, in any way, to consumption—rather, the charges simply reflect the costs incurred by DESC to serve these customers.

9. Given that the Solar Choice Tariffs achieve these specific objectives, they also fulfill the General Assembly's broader intent within Act 62.

10. As such, the Solar Choice Tariffs as proposed by DESC shall be effective for Customer Generator applications received after May 31, 2021.

11. The avoided cost values paid for export generation shall be updated annually in accordance with DESC's avoided costs, with the export methodology revisited every five years, in accordance with Act 62.

12. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

____
Justin T. Williams, Chairman
Public Service Commission of South Carolina

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2020-229-E

IN RE:

Dominion Energy South Carolina, Incorporated's Establishment of a Solar Choice Metering Tariff Pursuant to S.C. Code Ann. Section 58-40-20 (See Docket No. 2019-182-E)	)	**CERTIFICATE OF SERVICE**

This is to certify that I have caused to be served this day copies of **Dominion Energy South Carolina, Inc.'s Proposed Order** to the persons named below at the addresses set forth via electronic mail:

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This 14th day of April 2021